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ABSTRACT

This is the report from the workshop for the admission and placement of students from the Pacific-Asia Area. The basic purpose of this workshop was to bring together a group of experienced admissions officers and resource persons with expertise in the particular countries to be covered, in order to study, in some depth, foreign educational systems as they relate to education in the United States. The admission and placement recommendations resulting from the workshops are then made available to the broader admission community through follow-up workshops. There are 3 major sections to this report: Hong Kong-Malaysia-Singapore; Ceylon-India-Pakistan; and Australia-New Zealand. Also included is an overview of the panel discussions that covers Okinawa and the Pacific Islands. The recommendations in each of the country sections represent a consensus of the participants on how applicants from these countries should be considered for admission and placement in institutions in the United States. This report is intended as a practical reference quide for admission officers in the United States who are considering applicants from the countries discussed. (Author/PG)



The Admission and Placement of Students From The Pacific-Asia Area

A WORKSHOP REPORT

AUSTRALIA MALAYSIA
CEYLON NEW ZEALAND
HONG KONG PAKISTAN
INDIA SINGAPORE
OKINAWA AND PACIFIC ISLANDS



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NATIONAL INSTITUTE OF
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NATIONAL ASSOCIATION FOR FOREIGN STUDENT AFFAIRS

AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS AND ADMISSIONS OFFICERS

and

THE INSTITUTE FOR TECHNICAL INTERCHANGE, EAST-WEST CENTER





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THE ADMISSION AND PLACEMENT OF STUDENTS FROM THE PACIFIC-ASIA AREA

A WORKSHOP REPORT

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THE INSTITUTE FOR TECHNICAL INTERCHANGE, EAST-WEST CENTER



PREFACE

This is the report from the workshop held at the East-West Center of the University of Hawaii from December 1-13, 1969, co-sponsored by the National Association for Foreign Student Affairs (NAFSA), the American Association of Collegiate Registrars and Admissions Officers (AACRAO), and the Institute for Technical Interchange at the East-West Center. The success of this workshop was due largely to the efforts of Mr. Leo Sweeney, Project Director, and Mr. Lee Zeigler, Administrative Director. This was the fourth in a series of in-depth workshops focusing on particular countries and areas of the world, and the third to be held at the East-West Center covering Far Eastern countries. In December of 1968, a workshop devoted to some of the Latin American countries was held at the University of Puerto Rico.

This year, for the first time, AACRAO joined in co-sponsorship, thus opening up eligibility for workshop participation to members of both AACRAO and NAFSA. Twenty-four participants were selected on the basis of the twelve NAFSA regions which assured a broad geographical representation at the workshop. A list of participants is found in the appendix. The basic purpose of this and previous workshops has been to bring together a group of experienced admissions officers and resource persons with expertise in the particular countries to be covered, in order to study, in some depth, foreign educational systems as they relate to education in the United States. The admission and placement recommendations resulting from the workshops are then made available to the broader admission community through follow-up workshops and through publications such as this.

There are three major sections to this report, each authored by the resource person for that area: Hong Kong-Malaysia-Singapore by Philip Byers; Ceylon-India-Pakistan by Leo Sweeney; and Australia-New Zealand by Stewart Fraser. Also included is an overview of the panel discussions which covered Okinawa and the Pacific Islands and was written by Lee Zeigler. Each of these resource persons was responsible for his section of the report and for leading the study of the countries during the workshop. The participants were divided into study groups for each country, and this year, assisted the authors in drafting sections of the country reports. These individuals in the country study groups are listed on the introductory page for each of the major sections. The recommendations in each of the country sections represent a consensus of the workshop participants on how applicants from these countries should be considered for admission and placement in institutions in the United States.

NAFSA and AACRAO are indebted to the East-West Center for not only its financial and logistical support, but also for the excellent facilities which it provided for the workshop. The associations are also extremely appreciative of the financial support received from the Bureau of Education and Cultural Affairs of the Department of State, The Asia Foundation, and the College Entrance Examination Board.

This workshop report is intended as a practical reference guide for admissions officers in the United States who are considering applicants from the countries discussed. The resource persons, the workshop participants, and the organizations and agencies providing financial support hope that the information in this publication will enable admissions officers in colleges and universities in the United States to better evaluate applicants from these countries by knowing more about the educational and cultural backgrounds from which the applicants come.

Sanford Jameson Editor

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Overview and General Admission/Placement Recommendations

The general format of the Third Hawaiian Workshop provided for the treatment of three clusters of countries:

- (1) Australia and New Zealand (2 days);
- (2) Hong Kong, Malaysia, and Singapore (1-1/2 days);
- (3) Ceylon, India, and Pakistan (3 days).

In addition, a half day was devoted to discussions of the Ryukyus and the Pacific Islands.

For each cluster of countries, one or more faculty members from the University of Hawaii presented background lectures on the historical and cultural aspects of the countries. A U.S. resource person provided descriptive and qualitative information on the educational systems of each cluster of countries. These lectures and presentations were followed by group discussions of related admissions case studies. Based on all of this information, the Workshop participants formulated recommendations for the admission and placement of applicants from the different countries and educational systems.

It might be stressed at this point that the participants were divided into three "cluster study groups," each with the responsibility for writing the section of the Workshop report related to their cluster of countries. It is a tribute to their individual and collective efforts that before the Workshop closed, each report section had been written and was ready for editing by the U.S. resource person and the report editor.

One of the innovations in this Workshop was rather heavy use of not only overhead transparencies to describe educational systems but also 35 mm. slides of case studies, typical credentials, country scenes, and educational institutions. Plans are to have duplicate sets of those slides available to AACRAO and NAFSA regional associations to use in workshops and other programs.

General Admission/Placement Recommendations

A. Application Materials

The importance of compiling complete files on foreign applicants before deciding on their admission or placement came through "loud and clear" during the Workshop and especially in the case study discussions. In this connection the use of a form for a detailed, chronological statement by the applicant of his educational background is one of this Workshop's strong recommendations (as indeed it was from the Latin American Workshop).

B. English Proficiency

English proficiency, or rather the growing lack of it, is an increasing problem in several of the Asian countries studied in this Workshop. The use of TOEFL - the Test of English as a Foreign Language - for foreign applicants whose native tongue is not English is another strong recommendation from the Third Hawaiian Workshop. For as the use of the vernacular or language of the people increasingly predominates not only at the primary or elementary level but also at the secondary and even university levels, English standards inevitably deteriorate. In several of the countries, even leading educators and education officials readily admit that such is the case and that the situation is accelerating.

C. Eligibility in Own Country

Eligibility of an applicant to enter the university system in his own country is a guideline that most of the Third Hawaiian Workshop personnel would urge for use by admissions officers in addition to the guideline that a foreign applicant have as many years of formal schooling as his U.S. counterpart at either the



freshman or graduate admission level.

D. Local Examinations

A decided trend from University of London and University of Cambridge General Certificates of Education toward local ones was noted in several countries. In part, this may be attributed to growing nationalism, but to a great extent it may be linked with an increasing desire to have a national system of education from the primary stage through the highest level that meets national needs and is measured accordingly by its own examination system.

E. Syllabus and Examination Details

Syllabus and examination details, especially at the graduate admission level, are deemed to be increasingly important as applicants are considered from developing countries, such as were included in two of the country clusters in this Workshop. Student statements of such details are likely to be quite accurate and useful as substitutes for official syllabi and examination texts.

F. Assessment of Quality of the Individual and the Institution

Methods of assessing the quality of institutions and individuals in the admission and placement of foreign applicants include the use of such quality clues as these:

- (1) For the <u>institution</u>: its age, its relationship to the degree-granting institution, the scope of its programs (secondary, undergraduate, or graduate), the curricular structure and content of its programs, its library facilities, the quantity and quality of its faculty, its admissions requirements and competitiveness, and its grading system and grade distribution pattern.
- (2) For the <u>individual</u>: the years of formal schooling, the type of degree or program completed, his latest examination results (overall and by specific subject), consistency of examination results, his aptitude and achievement test results, his internal vs. external student status, and the quality of his references.

The Workshop participants expressed considerable concern that this report (and indeed other similar references) be used with due caution: that is, that the individual nature of U.S. institutions be kept in mind as admission and placement recommendations are applied. While on the one hand, recommendations in workshop reports and other recognized admissions references generally have been formulated from sound experience and for general applicability, and therefore should not be dismissed lightly; on the other hand, institutional experience may well run contrary to some such recommendations, and therefore such experience also should not be dismissed lightly.

Leo Sweeney Workshop Program Director



HONG KONG, MALAYSIA, SINGAPORE

by Philip Byers

Country Study Groups:

HONG KONG - Irene Parent Cynthia Fish

- Virginia Malone MALAYSIA Elizabeth Montgomery Mildred Joel

SINGAPORE - Donald Nelson Ethel Schenck William Parker



1. CHART OF HONG KONG EDUCATIONAL SYSTEM (For University-Bound Students)

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	υ 4 w	6 7 8 9 5 =	13 13 13	17	19 20	23 24 25	Age
	Nursery or Pre-School	Elementary	Secondary School		Undergraduate	Graduate and Professional	U.S.A.
		122400	789101	72 0	255	17 19 20	School . Year
 External Examinations Secondary School Entrance Examination Comes at the End of Primary 6. Certificate of Education (English) Comes at the End of Form V, Grade II. University of Hong Kong Advanced Level Examination Comes at the End of Upper Form VI, Grade 13. 		PRIMARY 1-6 (6 years)	SECONDARY, FORMS 1-V (5 years)	(2 years)	UNIVERSITY (First Decree)	GRADUATE AND PROFESSIONAL DEGREES	ANGLC-CHINESE (1)
		' 	· · ·				
 (2) External Examinations Secondary School Entrance Examination Comes at the End of Primary 6. Certificate of Education (Chinese) Comes at the End of Middle V, Grade II. Chinese University of Hong Kong Matriculation Examination Comes at the End of Middle VI, Grade 12. 	PRE-PRIMARY (Optional)	PRIMARY 1–6 (6 years)	<u> </u>	MATRICULATION, MIDDLE VI (1 ýear)	UNIVERSITY (First Degree)	GRADUATE AND PROFESSIONAL DEGREES	CHINESE (2)

HONG KONG

II. BACK GROUND

A. <u>Cultural</u>. Hong Kong is called the last great city of the West in the East! A British Crown Colony, Hong Kong is made up of the island of Hong Kong (29 sq. mi.), the Kowloon peninsula (3-1/4 sq. mi.), and the New Territories (365-1/2 sq. mi.). The latter consists of a large Chinese mainland area north of Kowloon and of 235 nearby islands which vary considerable in size. The city of Vitoria, the nucleus and capital of the Colony, is located on the north side of the island of Hong Kong, directly opposite from mainland Kowloon. Except for the neriod from 1941-45, when it was occupied by the Japanese, the Colony has been under British rule since 1841. Hong Kong, since its founding, has been a free port where law-abiding men have been free to come and go at will, carrying and exchanging goods without tariff or quota. This policy, along with a superb almost landlocked harbor, has assured the growth and greatness of Hong Kong as a commercial city. It holds not only a strategic position on the steamship routes of the world, but now on the main air routes as well. Hong Kong has achieved self-sustained growth by trade and not by aid.

The Chinese people form the overwhelming majority of the population of 3,800,000. Since 1958, civil war and social revolution in China have driven thousands of refugees into Hong Kong. These "second-class citizens," persons without a country, pose problems of housing, health, education, and employment and all other difficulties that poverty brings. Eventually, many emigrate to other countries via the educational route. (Presently [1968–69], there are over 5,600 Hong Kong students in the United States. On a relative population basis, they constitute the largest foreign student group. Many never return to Hong Kong.) All land in Hong Kong is owned by the government which has no elected officials but is headed by the Governor, who is a personal representative of the Queen. He appoints members to the Executive Council and Legislative Council who then act in response to the needs of the people.

Hong Kong, an experiment in "people solving," reflects the spirit of tolerance which people of different races, backgrounds, and religions show toward each other, and these attitudes have made integration and progress possible.

B. Educational. Over the past decade new classrooms have been opened in the colony at the rate of two per day with more than a million children in school today.

The first schools in the nineteenth century were missionary institutions patterned on western models. Early government schools generally followed the same pattern. Attendance was poor with more than half of the children of the colony not attending. In the 1890's, there was discussion about compulsory education, but this was never introduced. Even today education is neither compulsory nor free. From the beginning English was the medium of instruction in government schools, at least above the elementary level. Chinese schools, patterned after the traditional schools in China, also emerged early in the history of the colony. Today, schools in Hong Kong fall into one of three categories according to the language of instruction and the type of curriculum. They are: (1) Anglo-Chinese schools; (2) Chinese schools; and (3) English grammar-type schools. There is one American-type school offering primary and secondary education. Evening schools, teacher-training colleges, a technical college, private and post-secondary colleges are available on the post-secondary school level. There are two universities, the Chinese University of Hong Kong and the University of Hong Kong.

Milestones in the history of education would include the following:

- 1860 Board of Education organized.
- 1872 Missionally schools were offered government grants.
- 1887 Cambridge Local Examinations were introduced.
- 1909 Education came under the control of a Director of Education.
- 1912 Opening of the University of Hong Kong.
- 1936 Founding of the Technical College.
- 1940 Northcote Training College opened its doors as a teacher-training institution.
- 1941-45 War destroyed practically all that had been built up educationally.
- 1952 Grantham Training College established to train Chinese primary teachers.
- 1960 Post-Secondary College Ordinance was enacted.
- 1960 Sir Robert Black Training College opened its doors.
- 1963 Chinese University of Hong Kong was established.
- 1970 Technical Institute, Morrison Hill.

III. EDUCATIONAL SYSTEM TODAY

A. Introduction. The following is a general account of the educational system of Hong Kong. It is



neither complete nor all-inclusive, but it does attempt to provide an outline of the educational path followed by the typical Hong Kong applicant to a United States institution of higher learning. It is hoped and strongly recommended that the reader will also consult the readily available booklet called <u>Facts and Figures for the Admission and Placement of Hong Kong Students</u> by Philip Byers and published by the Institute of International Education, New York, 1969. This booklet provides many of the details purposely omitted from this brief description of the Hong Kong educational system, and it was written specifically to aid the admissions officer who must make decisions on the admissibility of a student from Hong Kong to a United States institution of higher learning.

B. General. The British Crown Colory of Hong Kong provides education from the primary to the doctoral level. However, the higher the educational level, the fewer the students who can be accommodated.

With regard to financial subsidy, there are three main types of schools: (1) those wholly run and financed by the government; (2) those run by voluntary groups and assisted financially by the government; and (3) those run and financed wholly by private groups or individuals.

Schools which received assistance from the government (#2 above) are again subdivided into three categories: (1) Grant Schools are given grants-in-aid which may be used for operating costs as well as for buildings and equipment. (2) Subsidized Schools are primary and secondary schools. The amount of subsidy paid is determined by the difference between approved expenditure and income. Subsidized schools may also be assisted in providing new buildings and equipment as well as for major repairs. (3) Assisted Schools may receive capital subsidies, interest-free loans and free grants of land from the government, provided they are non-profit making institutions.

C. <u>Primary Education</u>. Kindergartens provide pre-school education for children who are three to six years old. There appears to be a strong demand for this type of education from all sections of the community.

The six-year primary course normally begins at the age of six. The aim at this level is to provide a good general education appropriate to the particular environment of the child. Children are therefore taught basic skills and fundamentals of citizenship which it is hoped will serve them in later life. The schools at this level are almost all Chinese, although a few cater to such minorities as the Americans, English, Indians, Japanese, and Portuguese. There are also a few Anglo-Chinese schools at this level where English is the language of instruction.

- D: Secondary School Entrance Examination. Upon completion of the six-year primary program, suitable pupils are selected for places in government, or government-assisted secondary schools, by means of the Secondary School Entrance Examination which consists of one paper each in Chinese, English and Arithmetic. In September 1969, 20.9 percent of primary school leavers succeeded in "passing" this examination. Other students made arrangements on their own to attend private schools so that approximately 70 percent of all primary school leavers continued their education into the secondary level.
- E. <u>Secondary School</u>. The secondary program lasts for five years (Form 1 through Form V, U.S. grades 7-11) and culminates with the taking of the Hong Kong Certificate of Education.
- 1. Anglo-Chinese Schools. The aim of the Anglo-Chinese School system is to provide a broad general education in academic subjects taught through the medium of English. However, the study of Chinese is encouraged. The five-year course leads to the taking of the Hong Kong Certificate of Education (English). If one hopes to continue his formal education at higher levels or find rewarding employment, he should achieve on this examination at least five grades of "E" or better, including English and a science and arts subject.
- , Secondary technical schools offer a five-year course of general education with a technical bias. In addition to their academic subjects, the curriculum includes Woodwork, Metalwork, Technical Drawing, Housecraft, Needlework, and commercial subjects. This course also culminates in the taking of the Hong Kong Certificate of Education (English).
- 2. Chinese Middle Schools. Chinese Middle Schools also aim at providing their pupils with a general academic education. However, in this case, Chinese is the language of instruction with English taught as a second language. The five-year course leads to the Hong Kong Certificate of Education (Chinese).
- 3. English and American-type Schools. There are, in addition to the above, two British grammar-type secondary schools (King George V and Island School) which prepare students for the British university matriculation examinations. The International School at Repuise Bay is a typical American school, offering six years of primary schooling and six years of secondary schooling. Students in these schools do not sit for the examinations taken by the majority of Hong Kong students, i.e., the Hong Kong Certificate of Education.
- 4. Certificate of Education (English). This is a test of general education for students in Anglo-Chinese Schools who have completed Form V (eleven years of formal schooling). The certificate will show the standard



achieved in each subject taken. The examination is taken in May and June and results are announced in July. The student is required to take five subjects but may take as many as nine. A significant number of students do take more than the minimum required.

Although almost all students prepare for this examination by attending a regular secondary school, there is provision for studying for it through a program in special English classes at the Adult Education Evening Institute.

- 5. Certificate of Education (Chinese). The goals and content of this examination are similar to those of the Hong Kong Certificate of Education (English). The major difference is that it is given in Chinese. The examination is completed in June and results are announced in July. The minimum number of subjects to be offered is five, the maximum is nine. If one hopes to continue his formal schooling at higher levels, or if he hopes to gain satisfying employment, he should achieve at least five grades of "E" or better, including Chinese, English, and an arts and science subject.
- F. Matriculation Course and the Advanced Level Examination of the University of Hong Kong. A student who has gained the Hong Kong Certificate of Education (English) with appropriate results may continue toward university entrance by enrolling in a two-year Form VI program in an Anglo-Chinese school. This program usually leads to the Advanced Level Examination of the University of Hong Kong. The first year is referred to as Lower VI, the second as Upper VI. The language of instruction in this program is English. It should be remembered that completion of Lower VI normally represents twelve years of formal schooling for the Hong Kong student.

Upon completion of Upper VI (Grade 13), the student may sit for the University of Hong Kong Advanced Level Examination. This examination is recognized as being the equivalent of the University of London General Certificate of Education at the Advanced Level. A student will not be allowed to offer more than four subjects at one sitting on this particular examination. The student will generally either concentrate on science or arts subjects, depending on what course he wishes to follow at the University. This examination is given during April and May, and the results are available in mid-July.

G. Matriculation Course and the Chinese University of Hong Kong Matriculation Examination. A one-year Form VI course in the Chinese Middle Schools leads to the Matriculation Examination of the Chinese University of Hong Kong. It should be noted that this examination is not recognized as being equivalent to the GCE - Advanced Level.

A student must pass at one sitting examinations in Chinese Language, English Language, and three subjects in order to fulfill minimum matriculation requirements.

H. University of Hong Kong. The University of Hong Kong was established in 1911 with a land grant from the government and private endowments. Considering the number of Hong Kong persons in relevant age groups, the university degree enrollments are small. The 1968-69 figures by faculty are: Arts - 887, Science - 437, Medicine - 596, Engineering and Architecture - 479, Social Sciences - 248. Nearly all of the undergraduates are Hong Kong Chinese, but there are a few overseas students enrolled, mainly from Southeast Asia. A total of 746 undergraduate places were available for new students for the 1968-69 academic year.

The aim of this University is to provide education of British university standards for the people of Hong Kong. All the degrees of the University in professional subjects (Medicine, Architecture, and Civil, Electrical, and Mechanical Engineering) are on the same professional footing as those of universities in Britain.

Masters and doctoral programs are offered.

1. The Chinese University of Hong Kong. This institution was inaugurated in October,1963, by administratively uniting Chung Chi College, New Asia College and United College. The principal language of instruction is Cantonese, although English and Mandarin are frequently used.

There are presently (1968–69) three faculties at the Chinese University: Arts – 605, Science – 575, and Commerce and Social Science – 781.

The Graduate School of the University was established in September, 1966, and admits students for two years of postgraduate studies in Arts, Science, Commerce and Social Science leading to a master's degree.

J. The Technical College. There is one government Technical College in Hong Kong. The entrance requirement for most full-time classes is a Hong Kong Certificate of Education with passes in specified subjects.

The College has eight departments: Building, Surveying and Structural Engineering; Mechanical, Production and Marine Engineering; Textile Industries; Nautical Studies; Mathematics and Science; and Industrial and Commercial Design.



A full-time course leads to the College's own Higher and Ordinary Diplomas and to the associate member-ship examination of many British professional institutions.

The eight departments also provide part-time day and evening courses leading to College Certificates and to City and Guilds of London Institute qualification, which are at professional technicians' and craftmen's levels.

- K. Teacher Training. Full-time training is carried out by the Education Department's three Colleges of Education Northcate, Grantham and Sir Robert Black. All three colleges are offering two-year courses designed to produce teachers qualified to instruct in primary and the lower forms (I-III) of secondary school. Specialist third-year courses are offered to train specialist teachers who will teach at the secondary level in Mathematics, Domestic Science, Music and Art.
- L. <u>Post-Secondary Colleges</u>. There are over thirty post-secondary colleges of varying standards not in receipt of aid from the government. The main impetus behind their establishment was the influx of students and teachers from universities in China from 1947-50.

Although a Post-Secondary Colleges Ordinance was passed in 1960 - with the object of giving statutory recognition to colleges whose status approaches but does not attain that of a university - none of the existing institutions has, as yet, been given such recognition.*

Some day-colleges offer full-time, four-year courses of study in Arts, Science, Engineering and Commerce.

IV. GRADING SYSTEM

This section will describe the grading systems which prevail at various levels in the Hong Kong educational system. Year-by-year school grades, i.e., internal grades, are not included in this discussion.

Hong Kong Certificate of Education (English)

The Certificate of Education awarded to each student shows the standard achieved in each subject. Grades range from A (the highest) to H (the lowest). The median grade is E. Grades of A, B, and C are recognized by the University of London and some other overseas universities as equivalent to a pass at the ordinary level of the General Certificate of Education.

Hong Kong Certificate of Education (Chinese)

As noted above, a Certificate of Educatian is awarded to each student and shows the standard achieved in each subject. Grades range from A (the highest) to H (the lowest). E is the median grade. It is very important to note the major difference between the Chinese and English Certificate examinations; namely, that grades of A, B, and C on the former (Chinese) are not recognized by any examining body as being equivalent to GCE - Ordinary Level passes.

The University of Hong Kong Advanced Level Examination

Grades range from A (the highest) to H (the lowest). Interpretation of the grades is as follows:

Grade A - Pass at the Advanced Level with Distinction

Grade B - Pass at the Advanced with Credit

Grade C - Pass at the Advanced with Credit

Grade D - Pass at the Advanced Level

Grade E - Pass at the Advanced Level

Grade O - Pass at the Ordinary Level

Grade F - Fail

Grade G - Fail

Grade H - Fail

The Chinese University of Hong Kong Matriculation Examination

There are no grades indicated for subjects taken on this examination. If a subject is listed, then it has been

^{*} Hong Kong Baptist College as of April 1970 has attained statutory recognition.



passed. Subjects taken and failed would not show.

University of Hong Kong

Types and Levels of degrees are listed below:

Bachelor of Science, Special*
First Class Honours
Second Class Honours
First Division
Second Division
Third Class Honours

Bachelor of Science in Engineering
First Class Honours
Second Class Honours
First Division
Second Division
Pass

Bachelor of Arts
First Class Honours
Second Class Honours
First Division
Second Division
Third Class Honours

Bachelor of Science, General First Class Honours Second Class Honours Third Class Honours Pass

Bachelor of Architecture First Class Honours Second Class Honours Pass

Chinese University of Hong Kong

The Bachelor of Arts, Bachelor of Science, Bachelor of Commerce and Bachelor of Social Science all have the same ranking system:

First Class Honours
Second Class Honours
Upper Division
Lower Division
Third Class Honours
Pass

V. QUALITY FACTORS

When considering the Hong Kong student for admission, one must remember the extreme competition which exists within the system. Many students who are not eliminated by socio-economic reasons (drop-outs) are eliminated by the examinations which come at the end of primary school (Grade 6), Form V (Grade 11) and prior to admission to the University (matriculation examinations). Student mortality between primary school and university is high. Therefore, generally speaking, those who survive to higher educational levels are capable students. The quality of instruction in secondary courses (leading to the Certificate of Education) and matriculation





courses (leading to university admission) is maintained by the standardized syllabuses upon which examinations are based. Further, the examinations themselves tend to guarantee quality.

Lower Form VI Students. Generally speaking, a Lower Form VI (Grade 12) Hong Kong student who has achieved five grades of "E" on the Certificate of Education, including English and an arts and science subject, is worthy of consideration for admission, at the freshman level, to the majority of American universities and colleges. More informed judgments on the quality of a student can be made if the admissions officer requests or requires the College Entrance Examination Board (CEEB) tests results (Scholastic Aptitude Test* [SAT] and Achievement Tests), transcripts of the secondary school record, recommendations from principals, and the results of the Test of English as a Foreign Language (TOEFL). Needless to say, the better the student's performance on the Certificate of Education, the more likely he is to give a satisfactory academic performance at a school in the United States.

Upper Form VI Students. To determine the quality of an Upper Form VI student, one should request (1) the results of the Certificate of Education, and (2) the Advanced Level examinations of the University of Hong Kong, or equivalent examinations, such as the University of London Advanced Level examinations.** Students who are admitted to the University of Hong Kong usually must present three "A" level passes. However, for a more complete picture of the Upper Form VI student, one might request or require the SAT and Achievement Tests (CEEB), school staff recommendations, and a transcript of academic work done from Form III (Grade 9) to Upper Form VI (Grade 13).

Post-Secondary College Students. Students who are enrolled in such schools as the government Teacher Training Colleges (Grantham, Northcote, Sir Robert Black) or the government Technical College can best be judged by their performance on the Certificate of Education, the SAT and Achievements Tests (CEEB), school staff recommendations, and a transcript of academic work completed at the post-secondary college level.

Applicants from the post-secondary private colleges, none of which (except the Hong Kong Baptist College) qualifies for the recognition of the Hong Kong Education Department under the 1960 Post-Secondary Colleges Ordinance, can best be judged by their performance on the Certificate of Education, the SAT and Achievement Tests (CEEB), school staff recommendations, and a transcript of grades received directly from the school in which the student is enrolled.

Hong Kong Baptist College, according to their catalog, feels that students going from their institution to the States for study should have a grade overage of at least 1.5 on "3.0 for an 'A' and a 1.0 for a 'C' scale."

Students from post-secondary private colleges should be considered on an individual rather than an institutional basis. The quality of these institutions and the quality of departments within them varies greatly. Schools which are Educational Associates of the Institute of International Education should invariably request that students from these schools be interviewed.

University Students. Students from the University of Hong Kong or the Chinese University of Hong Kong can best be evaluated by requesting their transcript and evaluating the quality of their degree. Beginning in 1969, both of the universities gave their students degrees with the following designations: First Honours; Second Honours, Division I and II; Third Class Honours; and Pass. When evaluating these degrees, remember the intense competition to enter the universities. Generally speaking, students who are admitted to the University of Hong Kong and the Chinese University of Hong Kong compare favorably with students in the better universities and colleges in the United States. To get a fair appraisal of these students, it would be advisable to request or require the Graduate Record Examination (GRE), especially if the student is in those academic areas where language deficiences would not particularly hinder a good performance.

A final word: when evaluating the Hong Kong students, one should remember that some Hong Kong students have received instruction through the medium of English since the first grade (Primary 1). Others have received instruction through the medium of English from Form I (Grade 7) onward. The latter students are not unduly handicapped, especially in non-verbal portions, when sitting for such examinations as the College Board examinations (SAT and Achievement Tests) and the Graduate Record Examination. In addition, since some examinations on the Certificate of Education are now of the objective type and machine-scored, the Hong Kong student is becoming increasingly familiar with examinations of this sort, with the result that he is better able to perform on American standardized objective tests.

^{**} HKU "A" level results are available in mid-July of the year in which they are taken, and London GCE's late September of the year in which they are taken.



^{*}Do not give undue weight to the verbal score of the SAT. However, the SAT math score is reliable.

VI. SPECIAL CHARACTERISTICS

- A. Primary Education. It is hoped that subsidized primary schooling of six years' duration can be provided for all children between the ages of 6 to 11 who seek such education. It is anticipated that this number will affect 80 percent of the relevant population. The target date is 1970-71.
- B. Secondary Education. Government policy is to provide subsidized education in secondary school for 15-20 percent of the total number of students completing primary school (on the basis of selective tests) and in matriculation courses for approximately 5 percent of the relevant age group.

The government has approved in principle the establishment of a new type of institution, a junior technical school, which will provide integrated general and vocational training of three years' duration to primary school leavers up to the age of 16. These schools, while financially assisted by the government, will be established by voluntary agencies.

- C. Training of Teachers. Presently, students who hope to become qualified teachers take a tull-time course of two years' duration at one of the three teacher-training colleges (Grantham, Northcote, Sir Robert Black). As soon as practicable, it is hoped to increase this program to three years.
- D. Technical College. The government Technical College plans to increasingly emphasize the training of technicians and technologists. Its Higher Diplomas in Structural, Mechanical, Production, Electrical, and Electronic Engineering are now recognized as the basis for exempting the holders from the Part I examination of the Council of Engineering Institutions in the United Kingdom.
- E. Technical Institute. In a small way, the new Technical Institute is already operational in the facilities of the government Technical College in Hunghom. However, in 1970 it will move into its own facilities at Morrison Hill on Hong Kong Island. The main function of the Technical Institute is "to provide facilities for the training of pre-apprentices, craftsmen and lower level technicians in addition to offering courses in Business Studies and Technical Teacher Training." (The latter is urgently needed in Hong Kong as facilities for technical education expand.)
- F. The Chinese University. The Chinese University is composed of three schools, Chung Chi College, New Asia College and United College. This federal university is now widely spread over the colony. Chung Chi is located at Shatin, New Asia in Kowloon, and United on Hong Kong Island. However, by 1971 it is planned to have all colleges on the new campus at Shatin. During 1969, the University administrative staff was moved from Kowloon to the new administration building (Benjamin Franklin Centre) on the Shatin campus.

VII. RECOMMENDATIONS

- A. Credentials which should be on hand before an admissions decision is rendered:
- 1. Freshman Level:
 - a. Anglo-Chinese students should present, at the minimum, a Hong Kong Certificate of Education (English), a transcript of work for Forms III-V, the results of TOEFL, and the principal's recommendation. (See B. Placement Recommendations. 1, below.) In addition, if available, he should submit the results of the SAT and Achievement Tests (CEEB) and the Statement of Individual Results issued by the University of London General Certificate of Education examination syndicate.
 - b. Chinese Middle School students should submit the same documents as the Anglo-Chinese students (see a. above). If they sit, these students should also submit the results of the Chinese University matriculation examination which normally comes at the end of Middle VI (Grade 12). No advanced standing should be given for passes on this examination.
 - c. English School students should present the General Certificate of Education Ordinary Level results which they take at the end of Form V (Grade 11). In addition, a transcript and principal's recommendation should be required. SAT and Achievement Tests (CEEB) may be expected; TOEFL should not.
 - d. International School students should present a transcript of grades 9-12 and their principal's and teachers' letters of recommendation. It would be wise to ask for the SAT



and Achievement Tests (CEEB). TOEFL should not be expected of native speakers of English. However, a number of non-native speakers of English attend the school. These persons should be expected to submit TOEFL unless the school authorities vouch for proficiency in the language.

2. Advanced Standing (on the basis of "A" level examinations):

a. Anglo-Chinese students should submit the results of the University of Hong Kong Advanced Level examinations, or their equivalent. Such examinations come at the end of Upper Form VI (Grade 13). In addition, Certificate of Education, transcripts, principal's recommendation, and TOEFL should be required. The SAT and Achievement Tests (CEEB) will prove very helpful, if requested.

b. Chinese Middle School students, if asking for advanced standing, should normally submit the results of the University of London GCE-Advanced Level examinations. In addition, they should submit all the documents required of Anglo-Chinese students

(see a . above) .

c. English School students should present results of University of London GCE-Advanced Level examinations or their equivalent, plus the GCE-Ordinary Level examination results, principal's recommendation, transcripts, and the SAT and Achievement Tests (CEEB). Normally, TOEFL should not be expected nor required.

d. International School students will not normally seek advanced standing.

3. Transfer:

Students from the following types of schools may request transfer credit: (1) the degree-granting universities; (2) the government Technical College; (3) the teacher-training colleges (Grantham, Northcote, Sir Robert Black); or, (4) the private post-secondary colleges. If they do, they should all submit the results of the Certificate of Education, an official transcript (not grade slips) sent directly from the school they are attending, TOEFL score, and a recommendation (testimonial) from their principal or faculty (college) dean. Results of the Advanced Level Examination of the University of Hong Kong, GCE examinations, SAT and Achievement Tests (CEEB), if taken, should also be required.

NOTE: If a student entered a teacher-training college, the Technical College, or a private post-secondary college immediately after he had completed Form V (Grade 11) and received his Certificate of Education, transfer credit normally should not be given for the first year of work unless it is given on the basis of proficiency examinations on the campus of the admitting schoo:

Graduate:

a. The University of Hong Kong students should be expected to submit an official transcript (which does not show grades in individual courses) and a recommendation by the dean of the faculty. The Graduate Record Examination (GRE) might be expected of those students who are majoring in mathematics or the sciences, since verbal and cultural factors are not heavily involved.

. The Chinese University students should be expected to submit the same documents as

the University of Hong Kong students, plus TOEFL.

c. Private Post-Secondary College students. Since none of the post-secondary colleges (except the Hong Kong Baptist College) meets the standards set forth in the government's 1960 Post-Secondary Colleges Ordinance (revised 1964), the American college or university needs all the information available about an applicant to make a good decision. Although the Hong Kong Baptist College may be treated as an exception, diplomas granted by these schools cannot be accepted at face value as the equivalent of degrees issued by accredited schools in the United States.

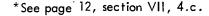
This being the case, students from these institutions should be required to submit their Certificate of Education, a transcript directly from the school attended, a recommendation from the academic dean of the college, TOEFL score, and the results of any examinations taken after completion of secondary school, e.g., London GCE's, matriculation, SAT and Achievement Tests (CEEB) etc



Occasionally, students who have come to Hong Kong from mainland China enter the post-secondary private colleges and make splendid records. These students frequently cannot produce all the standard academic documents. However, they should be given careful consideration for admission.

B. Placement Recommendations.

- 1. Five grades of "E" or better on the Certificate of Education and only Form V or Middle V (Grade 11) Recommended Action: do not admit.
- 2. Less than five grades of "E" on the Certificate of Education Recommended Action: strongly suggest that admission not be granted.
- 3. Five grades of "E" or better on the Certificate of Education and completion of Lower VI or Middle VI (Grade 12) Recommended Action: consider for freshman admission.
- 4. Five grades of "E" or better on the Certificate of Education, completion of Lower Form VI or Middle VI, plus Advanced Level University of London GCE's Recommended Action: admit with advanced standing.
- 5. Five grades of "E" or better on the Certificate of Education, Form VI (Upper and Lower), plus satisfactory University of Hong Kong or equivalent "A" levels Recommended Action: admit with advanced standing up to 30 semester hours.
- 6. Five grades of "E" or better on the Certificate of Education plus completion of two-year program at the Grantham, Northcote, Sir Robert Black teacher-training colleges Recommended Action: admit with some advanced standing (not to exceed 30 hours).
- 7. Five grades of "E" or better on the Certificate of Education and Ordinary Level Diploma of Hong Kong Technical College Recommended Action: admit at freshman level; college–level credit could be granted by proficiency examination.
- 8. Five grades of "E" or better on the Certificate of Education and Higher Diploma of Hong Kong Technical College Recommended Action: admit with advanced standing up to a maximum of 60 hours.
- 9. Bachelor's degree of the University of Hong Kong or the Chinese University of Hong Kong Recommended Action: recognize as equivalent of United States baccalaureate degree.
- 10. Master's degree from the University of Hong Kong or the Chinese University of Hong Kong Recommended Action: recognize as equivalent of United States master's degree.
- 11. Diploma of private post-secondary colleges; none of the Hong Kong private post-secondary colleges has been accredited under the 1960 Post-Secondary Colleges Ordinance* Recommended Action: consider each applicant independently, and reach a decision on the basis of the Certificate of Education, transcript of academic work completed, test scores from the SAT and Achievement Tests (CEEB), Graduate Record Examination, or other examinations, letters of recommendations (testimonials) and, if an Educational Associate of the Institute of International Education, an interview report.





VIII.

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I. CHART OF MALAYSIAN EDUCATIONAL SYSTEM (For University-Bound Students)

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•						Remove Form (4)	Lower Certificate of Education (3)	School Certificate (2)	Higher School Certificate (1)		

1, 2, 3 - External Examinations Taken by University-Bound Students.

4 - Students Changing from One Language Stream to Another at the End of Standard 6 May Be Put in a Remove Class for One Year. There They Are Prepared for the Transition.



II. BACK GROUND

A. <u>Cultural</u>. The early Buddhist Malay Kingdom of Sririyaya, based in Southeast Sumatra, dominated much of the Malay Peninsula from the 9th to the 13th centuries. About 1400, Malacca was founded by persons believed to be fleeing from Sumatra. In the early part of the 15th century, the Malays of Malacca were converted to Islam, the religion which, thereafter, spread over the entire Malay Peninsula.

The arrival of the Portuguese in Malacca (1511) marked the beginning of European influence in the area, with a subsequent decline in the power of the sultanates. The Dutch ousted the Portuguese from Malacca in 1641 in a drive to preserve their trade monopoly based in Java. In 1795, the Dutch were replaced in Malacca by the British, who had occupied Penang in 1786 and founded Singapore in 1819. By the Treaty of London (1824), Britain acquired dominance in the Straits of Malacca. However, the Malay states did not come under British rule until the last quarter of the 19th century. In 1896, the protected Malay states (Perak, Selangor, Negii Sembilan, Pahang) formed a federation and "a Resident-General was appointed for the purpose of promot-

financial cooperation between the States and achieving some degree of administrative uniformity." Thus, as one writer has put it, "the sultans reigned while the British ruled."

During World War II British rule was interrupted by the Japanese occupation. The British post-war plan was to introduce a unified system of government. However, this objective was strongly resisted by the educated Malay leaders who felt that, in a multiracial society, the Malays would suffer as a result of the plan. Consequently, in 1948, the Federation of Malaya was born in which "the traditionally separated states retained considerable autonomy." In 1957, full independence within the British Commonwealth was achieved. The British colonies of Singapore, Sarawak, and Sabah joined the Federation in September, 1963, and Malaysia came into being. Singapore, with a predominately Chinese population which had long resisted suggestions of common citizenship with the Federation of Malaya, withdrew from the Federation in 1965.

Malaysia extends over a total area of 128,328 square miles. A large portion of the area consists of dense tropical jungle, mountains or swamps. About 12 percent of land use is given to the cultivation of rubber, and about 4 percent to the growing of rice, coconut and oil palms. Malaya, one of the wealthiest countries in Asia, is the world's largest producer of both rubber and tin.

The total population of Malaysia is approximately 10 million. The ethnic composition is approximately: Malays, 44 percent; Chinese, 36 percent; Indians and Pakistanis, 10 percent; and non-Malay indigenous peoples, 8 percent. The Malays are predominately a rural people who control the social and political life of the country. The Chinese are primarily urban, and by virtue of their vocational interests in trade, business and finance, they possess a great deal of Malaysia's economic power.

The Malays, almost without exception, are Muslims who speak the Malay language. The Chinese speak a variety of Chinese dialects such as Cantonese and Hakka, as well as Malay. Educated Chinese also speak Mandarin. The Indians are mainly from South India and speak Tamil and Malay.

The Chinese, Malays, and Indians, while considering themselves Malaysians, tend to maintain their own cultural identities. They maintain their ties through educational and cultural organizations.

B. <u>Educational</u>. The first schools in Malaya were established by publicly spirited individuals, organizations, and religious missions. They were, to a large extent, privately controlled. The oldest existing school in Malaya is the Penang Free School which was founded in 1816 by the Colonial Chaplain of Penang. From its inception it was open to all races and religions, thus being a "free" school.

In 1905 the Malay College of Kuala Kangsar was founded. It was originally designed to prepare the sons of Malay royalty and other high-ranking Malays for entry into the Administrative Service of the government, and to encourage the Malays to see the advantages of higher education.

Up to the first world war, the government continued to establish schools for education in Malay and in English. Vernacular education originated in the Koran schools where, at about the age of six, the Malay child was taught by the Iman to behave correctly, to recite Arabic prayers and to read the Koran. The Chinese schools were largely established in the middle of the 19th century in populated areas. Until 1920, they were completely independent of government supervision. The curriculum of the Chinese schools, until 1911, followed the traditional and out-dated pattern of education in the village schools of China. Teachers and textbooks were imported from the mainland. After that date the modern schools in China served as models. In 1920, Mandarin was adopted as the language of instruction.

Tamil schools were generally confined to the rubber estates where, by law, the estate owners had to provide primary education for the children of workers. On the whole, Indians in the urban areas have preferred to



send their children to English schools.

With four types of schools operating over the years (Malay, English, Chinese and Tamil), education has had a tendency to reinforce the division among Malays, Chinese, and Indians. However, since independence in 1957 considerable effort has been made to have the schools help in working towards building a united Malay nation, and, at the same time, in preserving the four main cultures. This has been partially achieved by requiring government—aided schools to teach Malay and English, and, in addition, to teach subjects with a bias toward Malayanization. More recently, the elimination of the Cambridge School Certificate, the institution of Malay in Standard I (Grade i) as the only language of instruction, and the establishment of the National University, indicate the trend of things yet to come.

III. EDUCATIONAL SYSTEM TODAY

A. General. Responsibility for the educational policy and the development of the school system ultimately resides in the Federal Minister of Education who is represented in each state by an educational officer.

Schools within each state must be registered with the Federal Ministry of Education, which maintains standards through a Federal Inspectorate of Schools. The individual schools are managed by a Board of Directors, whose duties include selecting staff, including the headmaster.

Schools in Malaysia are of two kinds: (1) national, which use Malay as the medium of instruction, and (2) national-type, which use either English, Chinese or Tamil as the medium of instruction. Primary education, while not compulsory, is free in government-assisted schools. However, secondary education is free only in national schools. In national-type schools fees are charged, but 10 percent of the enrollment may be granted free places. Further, deserving students may receive financial assistance through Federal Minor Scholarships.

In 1968, the Malaysian government spent M\$401 million on education (including East Malaysia), which constituted approximately 20 percent of the government's annual recurrent expenditure for the year. This represented an increase of 4 percent over the 1967 appropriation; however, the total school population increased approximately 5 percent during the same period. The bill for education is paid totally by the federal government with some slight assistance from school fees and educational rates.

B. Primary Schools. Primary schools fall into two categories, national and national-type. As stated in the General section, Malay is the medium of instruction in the former while in the latter it is either English, Chinese or Tamil. However, beginning in 1970, it is planned to make Malay the medium of instruction in all schools, beginning at the Standard 1 level (Grade 1), and then adding a grade each year until Malay is the medium of instruction in all primary and secondary schools at all levels.

The primary school program is of six years' duration, and students may attend the school of their choice. Promotion is automatic and a common-content curriculum is followed in all government—assisted schools. In January 1969, there were 1,389,145 students attending 4,370 government—assisted schools, while only 14,459 were attended at a private schools. Students normally start primary school when they are six. The school year begins in January and ends with early December examinations.

C. Secondary Schools. Secondary schools are also classified as national and national-type, with Malay being the language of instruction in the former and English the medium of instruction in the latter. If, when entering secondary school, a student switches from one language stream to another, a distinct possibility, he will be put in a Remove Class for one year. There he will be grounded in the new language.

In January, 1969, there were 468,816 secondary school students enrolled in fully and partially assisted schools; 134,889 in the Malay stream, and 333,927 in the English stream. Another 40,915 secondary school students were attending private schools. Of this private school number, 1, 136 were in Malay schools, 21,303 in English schools, and 18,476 in Chinese schools.

Entrance to lower secondary school (Forms I-III), since 1965, has been automatic. However, to enter upper secondary (Forms IV and V) students must, at the end of Form III, sit for the Lower Certificate of Education (Sijil Rendah Pelajaran). At this point, the type of further education a student receives depends upon his performance on this examination. (See Appendix.) The possibilities for him are (1) upper secondary school with two years of academic study, (2) secondary technical school with a three-year program, and (3) secondary trade school with a three-year course geared to the electrical, mechanical, and building trades.

D. The School Certificate. Students following tracks I and 2 above normally sit at the end of Form V (Grade 11) for the Malaysia Certificate of Education and/or the Overseas University of Cambridge School Certificate. (See Appendis.) However, beginning in 1970, students will be able to sit only for the Malaysia Certificate of Education (Sijil Pelajaran Malaysia). One of the requirements for gaining this Certificate will be passing



the National Language Paper. Since this paper is considered to be a sub-standard, only a pass grade (7 or 8) will be awarded.

- E. <u>Sixth Form Entrance Examination</u>. In the past, after completing Form V, students who wished to enter Form VI had to sit for a special Sixth Form Entrance Examination. However, beginning in 1970, this examination was eliminated. Admission to pre-university (Form VI) education now will be based on the student's School Certificate performance.
- F. The Partial Higher School Certificate. Until 1969, students at the end of Lower Form VI (Grade 12) sat for a partial Higher School Certificate. This examination has now been eliminated.
- G. The Higher School Certificate (HSC). After two years of Form VI, students sit for the Higher School Certificate or its equivalent in the Malay medium (Sijil Tinggi Pelajaran). Entrance to the University of Malaya is based on the results of this examination. The HSC also serves as a terminal examination.
 - H. Teacher Training.
 - 1. Primary. There are three primary residential training colleges, two non-residential (day) training colleges, and 10 non-residential (day) training centers for the training of teachers to serve in Malay, English, Chinese, and Tamil primary schools. Prior to 1968, admission was based on the Lower Certificate of Education (Sijil Pendah Pelajaren). Now the minimum admission requirement is the School Certificate or its equivalent. In 1968, 354 students were admitted to the two-year, full-time primary teacher-training courses.
 - 2. Secondary. There are six Malayan Training Colleges and each specializes in certain subjects of the secondary school curriculum. The full-time program is two years in length. Minimum admission requirements are possession of a School Certificate or its equivalent, with at least a pass in Malay or English, and two other credits. In 1968, 475 students were admitted to these schools.
- I. <u>Technical College (Kuala Lumpur)</u>. For pupils who have completed a full secondary education, this college provides (1) a three-year diploma course in engineering, architecture and surveying (to train technical cadets for government services), and (2) a five-year program leading to full qualifications in some branches of engineering and to the intermediate level in architecture and surveying. For the three-year diploma programs, minimum admission requirements are a Division II School Certificate and credits in the national language or English, elementary mathematics and science. To enter the professional program, one must possess the Higher School Certificate with passes at principal (advanced) level in mathematics and physics.
- J. College of Agriculture (Serdang). This college, which was founded as a school in 1931, is located 14 miles south of Kuala Lumpur. It gained its college status in 1947 when its two-year diploma program was lengthened to three years. Admission qualifications are a School Certificate, Division I or II, with a pass in the national language, and credits in English and elementary mathematics. Applicants who also have credits in General Science I and II or a combination of chemistry and biology may be admitted at the second—year level.
- K. <u>Muslim College Malaya</u>. Since January, 1967, the Muslim College has been recognized by the government as a higher educational institution, specializing in Muslim Religious Education. It receives full government support. This college also prepares students in academic subjects for the Higher School Certificate. The first group sat the HSC examinations in 1968.
- L. MARA Institute of Technology. MARA had its origins in the Rural Industrial Development Authority (RIDA), having initially been established to prepare young Malays to participate in commerce and industry at the junior executive level. Presently located at Petaling Jaya (a "suburb" of Kuala Lumpur), the school will soon move to Batu Tiga. The anticipated enrollment is 4,000 students, 500 (approximately) in each of the following schools: (1) Accountancy and Business Finance; (2) Administration and Law; (3) Business and Management; (4) Applied Arts; (5) Engineering and Technology; (6) Pre-University Studies; and (7) Actuary, Computer Science and Statistics. In the past, according to an informed American educator who has lived in Malaysia for a number of years, the courses at MARA were the equivalent of terminal junior college programs in the United States.
 - M. National University. At the time of writing, there was not enough information available on this



institution to make any significant comments, except these: (1) the school will be located, for the present, at the site of the Malayan Teachers' College, Panti, Kuala Lumpur, and will be operational in May, 1970; (2) a Vice-Chancellor has been appointed, Dr. Mohd Rashdan Bin Baba, formerly principal at the College of Agriculture (Serdang); (3) Malay will be the medium of instruction; (4) the admission requirements will be similar to those prevailing at the University of Malaya; and (5) the university will be recognized and supported by the government.

N. University of Malaya (Kuala Lumpur). Although its history predates 1962, the University of Malaya was established, in that year, as the national university of the Federation of Malaya.

As of September, 1969, it enrolls 6,672 students in seven faculties: Agriculture (274), Arts (2,823), Engineering (359), Science (1,189), Medicine (568), Education (320), and Economics and Administration (1,139). Of the total number of students, 4,759 are male and 1,913 female. 99.34 percent of all students come from Malaysia. Ethnically, the percentages are as follows: Chinese, 52.94 percent; Malay, 35.57 percent; Indians, 7.51 percent; Ceylonese, 2.65 percent; Eurasians, 0.52 percent; Pakistanis, 0.23 percent; and others 0.58 percent. In 1968, the University conferred the following number of degrees:

Bachelor of Arts		
First Class Honours		
Second Class Honours (Upper Div.)		
Second Class Honours (Lower Div.)		
Pass		(26.5%)
Total	563	
Bachelor of Science With Honours*		
First Class Honours		(7.9%)
Second Class Honours (Upper Div.)		(24.8%)
Second Class Honours (Lower Div.)		(38.6%)
Third Class Honours		(28.7%)
Total	101	
Bachelor of Science (Pass Degree)		
Pass	137	
Bachelor of Engineering		
First Class Honours		(3.6%)
Second Class Honours (Upper Div.)		(27.3%)
Second Class Honours (Lower Div.)		(43.6%)
Pass		(25.5%)
Total	55	
Bachelor of Agricultural Science		
Honours		(10.7%)
Pass		(89.3%)
Total	28	
Diploma in Education		
With Distinction	3	(1.8%)
With Credit		
Others		(91.7%)
Total	168	
GRAND TOTAL 1	,052	

^{*}Minimum qualification to enter the program is holding the Bachelor of Science (Pass Degree) and having faculty and head of department recommendations.



In addition, in 1968 the University awarded seven doctorates, seven Master of Arts degrees, nine Master of Science degrees, one Master of Engineering Science degree, seven Master of Economics degrees, two Master of Agricultural Science degrees, and one Bachelor of Education (Post-graduate) degree.

In general, to be considered for admission, candidates must have passed at one sitting the Higher School Certificate or equivalent examination (which must be taken not earlier than two years after the School Certificate) in either two subjects at principal level, or one subject at principal level and two subjects at subsidiary level. The General Paper must be offered and a pass is desirable.

The following special admissions policies relate to the College of Agriculture (Serdang) and the Technical College (Kuala Lumpur):

Admission to the course in Agriculture:

A candidate with the Diploma of the College of Agriculture (Serdang) is eligible to apply for admission to the first year of the course in Agriculture, even though he may not possess the HSC qualification.

Admission to the course in Engineering:

A graduate of the Technical College with a diploma in Engineering and who also possesses the basic requirement of five credits in the Cambridge School of Certificate or equivalent examination is exempted from the University Entrance Examination and is eligible to be considered for admission to the Engineering course.

IV. GRADING SYSTEM

- A. Malaysia Certificate of Education and the GCE, 1970 Regulations. (This examination comes at the end of Form V, Grade 11. The standard reached in each subject will be indicated by "a grading from 1 to 9, 1 being the highest and 9 the lowest. 1, 2, 3, 4, 5 and 6 indicates a pass with credit (MCE) or ordinary level pass (GCE) in the subject. 7 or 8 indicates an MCE subject pass, and 9 a failure. 'Very Good' is indicated by 1 or 2."
- B. Joint Examination for the Higher School Certificate and GCE (Overseas Centres only), 1970 Regulations. (This examination comes at the end of Upper Form VI, Grade 13. "For principal subjects, the system of classification will be that used for GCE Advanced Level by all the approved examining bodies of the General Certificate of Education in the United Kingdom. There will be five categories of pass at principal subject level A, B, C, D, E, of which A is the highest and E the lowest. A pass at the subsidiary level will be indicated by 0 and failure by F. Results in the General Paper* and in subsidiary subjects will be indicated by grades from 1 to 9, grade 1 being the highest and 9 the lowest, and grades 1–6 being grades of pass. The standard reached in each paper taken as part of a principal subject will also be stated in terms of nine grades."
- C. University of Malaya. Evaluation of a student's performance at this University is determined by the degree he holds. However, the admissions officer should be wary of students who have been granted honors after having repeated an academic year. (See III, N.)

V. QUALITY FACTORS

A. Undergraduate Applicants. When evaluating college-bound students from Malaysia, it is important to remember that these students follow common content syllabuses which prepare them for externally administered examinations. Thus, the school attended and the internal grades are relatively unimportant. What is important is his performance on the standardized external examinations which come at the end of Form V (Grade 11) and Upper Form VI (Grade 13), namely the Malaysia Certificate of Education, the Cambridge School Certificate (to be discontinued in 1970), and the Higher School Certificate. If the student performs satisfactorily on these examinations, the admissions officer can be reasonably certain that the applicant has adequate preparation.

Admissions officers attending the workshop were unanimous in their opinion that Malaysian students presenting the School Certificate (Malaysia or Cambridge) as evidence of their ability and achievement should possess a Division I or Division II certificate (plus Lower Form VI) to receive serious consideration for admission.

^{*}This paper "tests the candidate's understanding and use of English and the extent to which he has achieved a maturity of thought appropriate to sixth form students in their second year. It is not primarily a test of general knowledge."



Generally, participants considered Division III certificates unacceptable. This would appear to be a reasonable posture, since the College of Agriculture (Serdang) and the Technical College (Kuala Lumpur) require at least a Division II certificate for admission to their diploma programs.

In the case of the Higher School Certificate, attendants at the workshop felt that applicants should possess a HSC with at least two principal level passes or one principal and two subsidiary passes gained at a single sitting to receive serious consideration for admission. Again, this is not an unreasonable position, since these are the minimum requirements for admission to the University of Malaya, University of Singapore, and Nayang University.

However, admission decisions should not be based on the results of a single examination. Therefore, the admissions officer will want to request transcripts and letters of recommendation (testimonials). In addition, it is entirely reasonable to expect Malaysian applicants to take examinations such as those of the College Entrance Examination Board (CEEB), and it is probably wise to require them. Normally, the Test of English as a Foreign Language (TOEFL) should be expected from all students who earn an English Language grade other than 1, 2, or 3 on the School Certificate or the Malaysian Certificate of Education.

B. Graduate Applicants. When considering students from Malaysia and other countries where students sit for advanced level examinations (HSC) as part of the undergraduate admission process, one should require the Malaysian graduate applicant to submit not only his university record, but also his results on the Higher School Certificate. Letters of recommendation also should be required from faculty members in the student's major department. At least one American educator, who has been teaching and interviewing Malaysian students for a number of years, is of the firm opinion that the Graduate Record Examination (GRE) should be required of all graduate applicants from Malaysia.

Normally, University of Malayo students will be proficient in English. However, students attending other tertiary institutions might be expected to submit TOEFL results, unless there is other objective evidence that the student is proficient in English.

Because of special conditions prevailing in Malaysia, one cannot assume that all students attending the University of Malaya or holding scholarships are necessarily the better students. Special admission and scholarship considerations are given on an ethnic basis.

C. <u>Miscellaneous</u>. A number of students attending institutions which require only the School Certificate for admission have gained, in fact, the Higher School Certificate. This should be taken into consideration when granting admission and placement.

Normally, students transferring from Malaysian institutions such as the Technical College (Kuala Lumpur), the Agricultural College (Serdang), the teacher-training colleges, and the MARA Institute of Technology should be expected to submit the results of (1) the School Certificate (Malaysia or Cambridge), (2) transcripts, (3) letters of recommendation, (4) TOEFL scores, and (5) in some instances, SAT and Achievement Tests (CEEB) results.

VI. SPECIAL CHARACTERISTICS

A. Recent Accomplishments.

- 1. Every child receives six years of free primary education, and many receive three years of free secondary education.
- 2. The literacy rate, especially among the young, is rising steadily.
- 3. The quality of education is being improved through the work of such groups as the Educational Planning and Research Division.
- 4. A National University has been established (1970) with Malay as the medium of instruction.
- 5. A university college has been established (1970) in Penang with sixty students enrolled in a faculty of science.
- 6. Muslim College in Petaling Jaya will be raised to university status during 1970.
- 7. MARA Institute of Technology will soon be moved from its present campus at Petaling Jayo to a new campus at Shah Alam.
- 8. Beginning in 1970, all instruction in Standard 1 (Grade1) English schools will be in Bahasa Malaysia (Malay). By 1979, instruction in all non-science subjects up to Form VI will be in Bahasa Malaysia, and in all subjects by 1982. English is to be a compulsory subject throughout the schools. (This entire development warrants watching.)



9. The Cambridge School Certificate, which, for years, Malay students have taken at the end of Form B (Grade 11), will be eliminated in 1970. Students will then sit only for the Malaysia Certificate of Education. To gain this certificate the student will have to pass Bahasa Malaysia (Malay). The Cambridge examination syndicate, in cooperation with the Ministry of Education, will continue to be the examiner.

B. Problems.

- 1. Bilingualism or multilingualism in the schools has several adverse results: (a) it results in a disproportinate amount of time spent on language study, and (b) it causes a retardation in concept development, as well as problems in sentence structure and spelling.
- 2. With an exploding school population, obtaining properly trained teaching staff has been difficult. In 1969, it was estimated that 25,000 of 60,000 teachers in Malaysia did not possess a School Certificate. Rural areas especially suffered from the lack of adequately prepared teachers. Qualified technical and vocational teachers particularly were in short supply.
- 3. With automatic promotion in the primary grades, it was found that many students in Standard 6 were illiterate. A Standard 5 assessment examination revealed that in Malay primary schools (many of these in rural areas) 50 percent to 70 percent were below standard. There was a 40 percent failure in Malay language tests by students attending Malay schools.

VII. RECOMMENDATIONS

- 1. School Certificate only (Cambridge or Malaysia 11 years) Recommended Action: strongly suggest admission not be granted.
- 2. School Certificate (Cambridge or Malaysia) plus Lower Form VI (12 years) Recommended Action: consider for freshman admission.
- 3. School Certificate (Cambridge or Malaysia) plus Upper Form VI (13 years) but without Higher School Certificate Recommended Action: consider for freshman admission.
- 4. Higher School Certificate (Cambridge or Malaysia) (13 years) with two principal (advanced) level passes, or one at principal level and two at subsidiary level Recommended Action: admit with possible advanced standing up to 30 semester hours.
- 5. Bachelor's degree, University of Malaya (three-year degree representing 16 years of education) Recommended Action: recognize as equivalent of baccalaureate degree in the United States.
- 6. Master's degree, University of Malaya (18 years) Recommended Action: recognize as equivalent of Master's degree in the United States.
- 7. Bachelor's degree plus Diploma of Education, University of Malaya (17 years) Recommended Action: recognize as equivalent of baccalaureate degree in the United States.
- 8. School Certificate plus three-year Diploma from the College of Agriculture (Serdang) (14 years) Recommended Action: admit with advanced standing up to 60 semester hours.
- 9. School Certificate plus three-year (full-time) Diploma from Technical College (14 years) Recommended Action: admit with advanced standing up to 30 semester hours.
- 10. Higher School Certificate plus four-year professional course in civil, electrical or mechanical engineering at the Technical College Recommended Action: admit with advanced standing, with 60 to 90 semester hours.

VIII.

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The editor of this section, Malaysia, also incorporated into the text much information derived from unpublished materials given to him by various members of the Malaysian Ministry of Education, as well as from administrative personnel of numerous academic institutions.



 CHART OF SINGAPORE EDUCATIONAL SYSTEM (For University-Bound Students)

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					Exam (3)	Primary School Leaving		School-Leaving Certificate (2)	Higher School Certificate (1)					

1, 2, 3 - External Examinations Taken by University-Bound Students.



SINGAPORE

II. BACKGROUND

A. <u>Cultural</u>. Excellent port facilities and a strategic location at the tip of the Malaysian peninsula have made Singapore one of the most cosmopolitan cities in Asia. As a major seaport, the island-city surpasses even London in tonnage and in the number of shipping lines served. It has had a special role in history, first as a vital link in the extension of British maritime power to the East, and now as a viable, independent nation. Singapore has a land area of 225 square miles and a population of approximately 2,000,000, 75 percent Chinese, 12 percent Malay, and 13 percent Indians, Ceylonese, Eurasians.

In 1819, when the island was ceded to Sir Stamford Raffles as agent of the British East India Company, Singapore had a total population of just 150 people, including approximately 80 Malays and 40 Chinese. The only schooling to be found was in small clusters of Chinese writing classes or in classes where the Koran and Arabic were taught to Muslim Malays. Raffles made the first attempt to establish a formal education system by proposing a government-supported school which was to serve the island by providing a means to (1) improve the social and economic order; (2) stimulate "moral progress," and (3) develop the study of language and culture. This was indeed a unique proposal for his time, considering that it was made several decades before a state-supported system of public education was established in England itself. Such was the vision of a man who is credited as the founder of modern day education in Singapore. Although the institution he established in 1823 could not survive the "frontier-town" atmosphere of the rapidly growing port city, it was reconstituted in 1909 into what is now one of the best secondary schools on the island, Raffles Institution.

B. Educational. Historically, the two main streams of education have been (1) the primary and secondary English schools which were either government-aided, or private, and (2) the Vernacular schools with instruction given in Malay, Chinese, or Indian. The latter schools were mostly primary, except for the Chinese middle schools.

In the 1920's, the higher education was instituted in the form of teacher-training colleges and technical schools. Raffles College, established in 1928, became the most important training institute for middle and secondary teachers in Singapore, while Singapore Polytechnic, founded in 1958, became the major technical institution.

Education suffered a serious setback during the Japanese occupation during World Wer II, but this period signaled the beginning of nationalistic feelings within the colony. In addition to fostering a strong independence movement, reaction to Japanese rule led to a growing awareness among the Malays and Chinese of the type of education they wanted for their children. It was becoming more and more apparent that English grammar type schooling was not relevant to their social, cultural and economic needs.

In 1955, the first elected Singapore Government established a Ministry of Education to replace the old British Education Board. Singapore became completely self-governing in 1959, and achieved independence in 1963 within the Federation of Malaya. Unfortunately, the creation of the Federation highlighted the long-standing ethnic and racial differences between Malays on the mainland and the Singapore Chinese. Severing its participation in this "Experiment in Multiracialism," Singapore withdrew from the Federation of Malaya and became an independent member of the British Commonwealth in 1965. The University of Malaya, established in Singapore in 1949 (an amalgamation of Raffles College and the King Edward VII College of Medicine), already had been renamed the University of Singapore in 1962.

The role of nation-building is a difficult one. To accomplish this task, the government of Singapore has placed great emphasis upon technical education. The First Five-Year Plan (1961-65) called for (1) equal educational opportunity and equal treatment of the language streams; (2) introduction of bilingual education in secondary schools; and (3) the rapid development of technical and science education. The Second Five-Year Plan (1966-70) places emphasis on the expansion of all educational facilities at the secondary and tertiary levels.

There are two areas of immediate concern in Singapore resulting from the above proposals. First, the determination to establish genuine bilingualism (Chinese and English) in all secondary schools could have serious effects on the immediate future of education in Singapore. The transitional period of converting textbooks and the medium of classroom instruction could be disruptive to the educational process and lower its quality. Nevertheless, it is expected that by the early 1970's such courses as history and civics will be taught in Chinese, while science and mathematics will be taught in English. Malay will be compulsory as a subject for all students. Secandly, it appears that the increasing emphasis on technical education could create a shift in governmental financial priorities, thus reducing the support for secondary and university education to the detriment of both.



These developments should be followed by United States admissions officers.

III. EDUCATIONAL SYSTEM TODAY

- A. <u>Pre-primary Schooling</u>. Pre-primary school (kindergarten) of one or two years in length is available, but optional, to children up to six years of age.
- B. Primary Schooling and the Primary School-Leaving Certificate. At the age of six a student normally embarks on the primary school program of six years. Some students headed for vocational programs may remain in primary school for eight years, completing the normal study program in addition to technical training. At the successful completion of primary school, the student sits for the Primary School-Leaving Certificate and may then proceed to secondary school (including academic, technical, commercial or multilateral) or a vocational school.
- C. Secondary Schooling and the School Certificate.* The four-year secondary program leading to the School Certificate consists of two two-year cycles. At the conclusion of these two cycles, the student sits for the School Certificate Examination. All candidates for the School Certificate must sit for at least six subjects; these must include English language and subjects chosen from at least three of the following groups:
 - 1. General Subjects: Literature in English, Religious Knowledge, History, Geography.
 - 2. Languages: Latin, Greek, French, German, Spanish, or other approved languages.
 - 3. Mathematics: Mathematics, Additional Mathematics.
 - 4. Science: General Science, Additional General Science, Agricultural Science, Physics, Chemistry, Biology, Physical Science, Botany.
 - 5. Arts and Crafts: Art, Music, Metalwork, Metalwork (Engineering), Needlework and Dressmaking, Cookery, General Housecraft.
 - 6. Technical and Commercial Subjects: Engineering Science, Surveying, Geometrical Mechanical Drawing, Geometrical and Building Drawing, Commercial Studies, Commerce, Principles of Accounts, Health Science.

To qualify for the Certificate a student must meet all requirements at one and the same examination. The requirements are: (a) reach a satisfactory general standard in their best six subjects and either (b) pass in at least six subjects (including English language) with credit in at least one of them, or (c) pass in five subjects (including English language) with credit in at least two of them.

Certificates are awarded in First, Second, and Third divisions. A First Division School Certificate is awarded to candidates who (a) pass in six or more subjects, which must include subjects from three of groups 2, 3, 4, 5 and 6 above; (b) pass with credit in at least five of these subjects, including English language; (c) reach a high level of standard judged by performance in the best six subjects; in other words, score 23 points or less (6 is the lowest possible) in the best six subjects. Under certain circumstances, 24 points will earn a Division I certificate.

A Second Division School Certificate is awarded to candidates who (a) pass in six or more subjects, which must include English language and subjects from three of the groups 2, 3, 4, 5 and 6 above; (b) pass with credit in at least four of these subjects; (c) reach a general standard as judged by performance in the best six subjects; numerical value of the six best subjects should not total more than 33 or less than 24.

A Third Division School Certificate is awarded to all remaining successful candidates, i.e., to those whose points in the six best subjects do not exceed 45.

- D. <u>Pre-University Schooling and the Higher School Certificate</u>. A two-year, pre-university program of studies leading to the Higher School Certificate follows for those students planning to attend the university. The student may then be awarded a Higher (Full) School Certificate and be eligible to enter a university program. To gain a Higher (Full) Certificate students must at one and the same examination enter and sit for a sufficient range of subjects and pass in the General Paper (Cambridge) or the compulsory paper (Government Higher School Certificate [HSC] [Chinese] Examination) and
 - either 1) pass in at least three principal subjects,
 - or 2) pass in at least two principal subjects and two subsidiary subjects,

^{*} See appendix for the new Singapore-Cambridge General Certificate of Education and sample certificate.

or or pass in at least two principal subjects and one subsidiary subject and reach a certain standard as defined by the grades in the two principal subjects in which they have passed.

Admission to the Higher School Certificate examination is limited to those candidates who have gained a School Certificate or its equivalent or who, while not gaining a School Certificate have passed, at one sitting, with credit in at least three School Certificate subjects (or three GCE subjects). This examination includes subjects at principal (advanced) and subsidiary (ordinary) levels. Principal subjects are major subjects in a two-year course beyond the School Certificate or GCE Ordinary Level stage. Subsidiary subjects are minor subjects taken in a two-year course, or subjects in a one-year course, beyond the School Certificate or GCE Ordinary Level stage.

E. <u>The University of Singapore</u>. Admission to the University of Singapore (established 1962) is based on either the <u>Higher School Certificate</u> Examination of the Cambridge Local Examinations Syndicate or the Chinese Higher School Certificate of the Singapore Ministry of Education.

The minimum standards (1969) for admission are: (1) Cambridge Higher School Certificate (English) with passes (at one and the same examination) either two subjects at the principal level or one at the principal and two at the subsidiary level. The General Paper must be offered, but the general requirement of pass may be waived if a candidate has passed well in other subjects; (2) Chinese Higher School Certificate with pass in oral English and passes (at one and the same examination) in either two subjects at the principal level or one subject at principal and two at subsidiary level. A pass in English at least at subsidiary level is compulsory. The Chinese language paper must be offered but may be waived if other results are good; (3) Cambridge Higher School Certificate Examination in Malay with pass in the General Paper, in Oral English, and passes (at one sitting) in either two principal level subjects or one subject at principal level and two at subsidiary level. The oral English requirement may be waived for candidates with "credit" in English language on the Malaysia Certificate of Education Examination.

The minimum standards above do not assure admission; the candidate is only eligible for selection.

The University offers a three-year bachelor's program, a four-year Honours degree, and advanced degrees at the master's and doctoral levels.

F. <u>Nanyang University</u>. Nanyang University (this Chinese university opened in 1956) admits students who have completed secondary education and have taken one of the following: (1) Higher School Certificate (Chinese) conducted by the Singapore Ministry of Education; (2) Cambridge Higher School Certificate (English or Malay); or (3) Entrance Examinations conducted by Nanyang University. Option (3) is only for those candidates who have received their secondary education elsewhere and were therefore unable to take either of the first two examinations.

Candidates may qualify by one of the following: (1) Higher School Certificate (Chinese) with passes (at one sitting) in two subjects at the principal level or one subject at principal and two at subsidiary level in addition to a pass on the Chinese language paper. The Chinese language paper requirement may be waived (except for students entering the Department of Chinese Language and Literature or History) if a candidate has obtained good results in two subjects at principal level and one at subsidiary level; (2) Cambridge Higher School Certificate (English or Malay) with passes (at one sitting) in two subjects at principal level or one subject at principal and two at subsidiary level in addition to a pass on the General Paper. The candidate must also have a working knowledge of Chinese.

Nanyang University offers a three-year bachelor's degree as well as an Honours degree. The degree from Nanyang is now (1969) fully recognized by the Singapore government.

G. Ngee Ann College and the Singapore Polytechnic Institute. Two other institutions of higher education have ceased to exist as degree-granting institutions in 1969.

Ngee Ann College is now known as Ngee Ann Technical College. Ngee Ann College was founded in 1960 as a private college by the Chinese community and designed for students who graduated from Chinese high schools. It required completion of lower middle three and upper middle three (the six-year secondary cycle) for admission. With the revision of secondary education, the requirement became completion of Secondary IV (ten years of primary and secondary schooling) and Pre-University I and II. It did not require successful completion of the Higher School Certificate. After Singapore became an independent nation (1965), it became a college for Home Economics, Mechanical Engineering, and Chemical Engineering, issuing diplomas, not degrees. Degrees earned at Ngee Ann never have been recognized by the Singapore government.

The Singapore Polytechnic Institute's degree-granting program became part of the University of Singapore



in 1969. It will now award diplomas at two levels: professional and technical. Length of courses vary from two to five years in full-time attendance or four to five years in part-time attendance. Admission requirements vary with the program involved.

H. Teacher Training and the Teacher-Training College. A single system of in-service training was introduced in 1960. Admission to teacher-training programs is based on the School Certificate (ten years of schooling). A two-year, full-time, or three-year, part-time program leads to Primary Teacher Qualification.

Teachers' Training College in Singapore (TTC) is the only government institution offering professional education for teachers to serve in government or government-aided schools in Singapore. It has three levels of training: (1) for holders of the School Certificate, (2) for holders of the Higher School Certificate, and (3) for holders of University degrees. For the first level, the course requires two years full-time (three years part-time); for the second level, two years part-time; and for the third level, one year. Beginning in 1969, the course will have been offered jointly by the University of Singapore and Teachers' Training College, and a Diploma in Education will be awarded by the University upon satisfactory completion.

Some students may complete eight years of primary school and take the Primary Vocational Schools. School Leaving Examination and then enter a two-year vocational school. Upon completion, a student will earn a Vocational School Certificate and be eligible for admission to a vocational institute.

The vocational institutes generally offer two-year programs in Crafts. Satisfactory completion results in a Craft Certificate.

Vocational training centers offer trade courses ranging from six to nine months' duration.

IV. GRADING SYSTEM

A. School Certificate

- 1 2 Very Good
- 3 6 Pass with credit
- 7 8 Subject Pass

B. Higher School Certificate

- A Pass at principal level
- B Pass at principal level
- C Pass at principal level
- D Pass at principal level
- E Pass at principal level
- 0 Pass at subsidiary level
- F Fail

C. University of Singapore

Degrees granted at levels:

First Class Honours

Second Class Honours (Division I and II)

Third Class Honours

Pass

D. Nanyang University

DIST (Distinction) 90% and above 80 - 89

A (Very Good)

70 - 79

B (Good) C (Pass)

60 - 69

(Redeemable

50 - 59

Failure)

E (Bad Failure)

Below 50%

QUALITY FACTORS

A. Undergraduate Applicants. When considering Singapore applicants for admission as freshmen, it is



important to remember that the minimum qualification for admission is the School Leaving Certificate which comes at the end of Secondary IV, after ten years of formal education. In Singapore, students may sit for any one of four certificates: Cambridge School Certificate Examination, Government Secondary IV School Certificate (Chinese) Examination, Malaysia Certificate in Education (Malay medium) Examination, and School Certificate Tamil Examination.* Workshop participants felt that minimum requirements for granting freshman admission to Singapore students were possession of one of the above certificates, plus two years of pre-university schooling. (See section VII.)

When evaluating undergraduate applicants from Singapore, it is also important to remember that these students follow uniform syllabuses and sit for common examinations. Thus, the school attended and the internal grades are relatively unimportant. What is important, academically, is his performance on the standardized external examinations which come at the end of Secondary IV (Grade 10) and Pre-University 11 (Grade12).**

If the student performs satisfactorily on these examinations, the admissions officer can be reasonably certain that the applicant has been prepared for higher education.

Workshop participants were unanimous in their opinion that Singapore students presenting the School Certificate as evidence of their ability and achievement should also possess a Division I or Division II certificate (plus two years of pre-university schooling) to receive serious consideration for admission. Generally speaking, admissions officers attending the workshop considered Division III certificates unacceptable.

In the case of the Higher School Certificate, it was felt that applicants should possess a HSC with at least two principal level passes or one principal and two subsidiary passes gained at a single sitting to receive serious consideration for admission. This is not an unreasonable position since these are minimum requirements for admission to the University of Singapore, Nanyang University, and the University of Malaya.

Admission judgments, however, should not be based on the results of a single examination. The admissions officer will want to request transcripts and letters of recommendation (testimonials). In addition, it is reasonable to expect Singapore applicants to take examinations such as those of the College Entrance Examination Board (CEEB). Normally, the Test of English as a Foreign Language (TOEFL) should be expected from all students who earn an English Language grade of other than 1, 2, or 3 on the School Certificate.

B. Graduate Applicants. While institutions in the United States do not normally look behind the university or college record when making graduate school admission decisions, it seems wise to do this when considering students from Singapore and other countries where students sit for principal (advanced) level examinations as part of the undergraduate admissions process. Therefore, one should not only require the Singapore applicant to submit his wniversity record, but also his results on the Higher School Certificate. Letters of recommendation should also be required from faculty members in the student's major department. The Graduate Record Examination (GRE) might also be required, especially of those students who have majored in mathematics or science. The verbal portion of the GRE aptitude should not be given undue weight.

Normally, University of Singapore students will be proficient in English. However, students attending other tertiary institutions might be expected to submit TOEFL results, unless there is other objective evidence that the student is proficient in English.

C. <u>Miscellaneous</u>. A number of students attending institutions such as Singapore Polytechnic and the Teacher Training College in programs which require only the School Certificate for admission may, in fact, have the Higher School Certificate. This should be taken into consideration when granting admission.

Students transferring from tertiary institutions other than the University of Singapore and Nanyang University should be expected to submit the results of (1) the School Certificate; (2) transcripts; (3) letters of recommendation; (4) TOEFL scores; and (5) where appropriate, the SAT and Achievement Tests (CEEB) results.

VI. SPECIAL CHARACTERISTICS

Faced with the withdrawal of British military forces in 1971 and the possible economic crisis which will accompany that withdrawal, Singapore has had to develop "a counter-recession strategy." The embryonic nation must industrialize if it is to survive in the 1970's. The decision to industrialize has greatly affected the educational system which has traditionally created a surplus of academically trained white collar workers and a shortage



^{*} Normally, the Cambridge School Certificate and its equivalent are taken after eleven years of formal schooling. However, in Singapore the eleven-year curriculum is compressed into ten years.

^{**}The examinations which come at the end of Pre-University II are the Cambridge Higher School Certificate Examination, the Government Higher School Certificate (Chinese) Examination, and the Higher School Certificate (Malay) Examination.

of skilled and qualified technologists and technicians. Today, the educational program has been restructured to correct the imbalance. The first restructuring came within the Ministry of Education itself when it was divided into a General Education Department and Technical Education Department. The functions of the latter were to take over all technical and vocational education below degree or professional diploma level and to reorganize the secondary education program so that students would receive more technical subjects and workshop practice along with their academic subjects. The results of the latter were that in 1969 all boys and 50 percent of the girls in Secondary I (Grade 7) were taking, in addition to their academic subjects, technical subjects, including workshop practice. They will continue to do so through Secondary II (Grade 8). At that point, they will either proceed to Secondary III (Grade 9) and IV (Grade 10) and then go on to Pre-University classes as is the pattern at present, or branch off to a variety of new educational establishments to train as craftsmen and technicians. The objective of the government is to have one out of every three secondary school graduates possess a technical skill.

Other changes have recently been made which also greatly affect education in Singapore. The most important of these are:

- 1. Bilingualism in the schools;
- 2. Improving the quality of education at all levels; and,
- 3. Integration of schools to be extended to aided schools.

Bilingualism in the schools is not new, but the approach now being used is new. In 1969, the students sitting for the School Certificate took compulsory second language papers, although passing them will not be required to gain a certificate. In addition, greater facility in bilingual attainment will be achieved by making more use of the second language in certain subjects. Generally speaking, language, social sciences and humanities will be taught in the student's vernacular while mathematics and sciences will be taught in English.

Achieving better quality in education is also being sought by providing full-time teacher-training, elimination of the two-shift system now prevailing in the schools, and by the establishment of an educational research and statistics department.

VII. RECOMMENDATIONS

- 1. Cambridge School Certificate or Government Secondary IV School Certificate (Chinese) (10 years) Recommended Action: strongly suggest admission not be granted.
- 2. Cambridge School Certificate or Government Secondary IV School Certificate (Chinese) plus one year Pre-University (11 years) Recommended Action: strongly suggest admission not be granted.
- 3. Cambridge School Certificate or Government Secondary IV School Certificate (Chinese) plus two years Pre-University without Higher School Certificate (12 years) Recommended Action: consider for freshman admission
- 4. Higher School Certificate with two years Pre-University with two principal (advanced) level passes or one principal level pass and two subsidiary (ordinary) level passes Recommended Action: admit with advanced standing up to 30 semester hours.
- 5. Bachelor's degree from Nanyang University or the University of Singapore Recommended Action: recognize as equivalent of United States baccalaureate degree.
- 6. Cambridge School Certificate or Government Secondary IV (Chinese) plus two years full-time, teacher-training diploma (primary) (12 years) Recommended Action: consider each applicant independently and reach a decision on the basis of School Certificate, transcripts of academic work completed, SAT and Achievement Tests (CEEB) results, letters of recommendation, and IIE interview.
- 7. Cambridge Higher School Certificate plus two years full—time, teacher—training diploma (secondary) (12 years) Recommended Action: admit with advanced standing up to 30 semester hours.
- 8. Cambridge School Certificate or Government Secondary IV School Certificate plus three-year Technical Diploma from the Singapore Polytechnic Institute Recommended Action: admit with advanced standing up to 30 semester hours.

VIII.

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The editor of this section, Singapore, also incorporated into the text much information derived from unpublished materials given to him by various members of the Singapore Ministry of Education, as well as from administrative personnel of numerous academic institutions.



AUSTRALIA, NEW ZEALAND

by Stewart Fraser

Country Study Groups:

AUSTRALIA

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I. CHART OF THE AUSTRALIAN EDUCATIONAL SYSTEM

					
Age	Ų.S.A.	School Year	← Ph.D		AUSTRALIA
25	•	20	111.0,		
24	Graduate	19			·
23	and	18	M.A	-	
22	Professional	17	Honors ———		
21		16	< В.АВ.S>		
20		15		l	·
12	Undergraduate	14			University
18		13	High School		Matriculation
17		12	→ Graduation	6	Matriculation
16		11		5	
15	Secondary	10		4	
14	School	9		3	
13		8	·	1	
12		1 - 2			Forms
		ļ		6	
11		5		5	
10	Elementary			4	·
9	Liememary	4		2	
8	· .	3		i	
<u></u>	·	2		 	Grades
6		1		1-2	Years Preparatory
5	Kindergarten	4			
4	Nursery or		A		Pre-School
3	Pre-School		Í		



AUSTRAL1A

BACKGROUND

A. <u>Culturol</u>. Australia is an English-speaking country with a population of aver 12 millian people. Its size is approximately that of the United States, excluding Hawaii and Alaska. Geographically, it is situated in the southern hemisphere with almost 40 percent of its land mass to the north of the Trapic of Capricorn. Since 1901, it has been a federal commonwealth camprising six states and two territories.

The original inhabitants of Australia were the aborigines who are believed to have come from Southeast Asia more than 12,000 years ago. Today, they number about 45,000 while the part-aboriginal population is estimated at 77,000. Some live today according to their traditional cultures in the inland, drier regions; and others live in government settlements or mission stations in the mare sparsely settled areas. Other aborigines live outside these reservations, accepting ways somewhat similar to those of other Australians in terms of employment, housing and education.

Early in 1788, the first British settlement was established in New South Wales. Almost three-fourths of this group of 1,030 persons were convicts, but free settlers followed, bringing with them British traditions in politics, economics, and social institutions. Hence, in the early days of the colony, education was left to religious groups and individual initiative, which frequently resulted in competitive rivalry and inadequate provision of schools in less-populated areas.

B. Educational. After a period of educational confusion, all churches were granted the right to establish schools at public expense, but this arrangement also proved ineffective. In 1848, in New South Wales, for example, the government administered such publicly supported schools as had been established under a Nationa? Education Board while subsidized denominational schools continued under a separate board. Continuing conflict defeated this arrangement also, and it was decided that a national system could not be developed upon a denominational basis. Constant disagreements and large numbers of children not attending school led Victoria in 1872 to enact legislation making education national, centralized, sectarian, free and compulsory. Aid was withdrawn from denominational schools. Other states followed a similar arrangement, thus establishing the standard Australian pattern of centralized State public education throughout the country. Each state created an Education Department under the direction of a government Minister of Education and a permanent public service official, known variously as the Director or Director General of Education. The State Education Departments undertook the task of expanding first the primary and later the secondary facilities to meet the needs of a growing population. Many of the denominational and private schools continued without state financial assistance, and they have become an important part of the total educational program, particularly at the secondary level. Overall they cater to some 25 percent of Australia's school population. Today, some financial aid is being granted to the independent schools from the Commonwealth Government (for science). This system of state and private schools makes for greater opportunity within and between the states. School teachers in the state schools are public servants with security of tenure, but with some reduction of rights for individual criticism of the system.

Although education is a constitutional responsibility of each state, the Commonwealth Government is gradually assuming larger financial responsibility, especially in the field of higher education. This is becoming increasingly necessary with the expansion of tertiary institutions. There is at least one university in each state, while the most populated states, Victoria and New South Wales, have three and five respectively. Universities obtain their funds from three major sources – Commonwealth and State Gavernments, tuition and fees, and grants and endowments. Other important state institutions of higher education include teacher's colleges, technical colleges, agricultural colleges, and conservatories of music. A wide range of adult education courses usually focusing on non-vocational and cultural subject areas is available in all states either through Education Departments or the universities.

III. EDUCATIONAL SYSTEM TODAY

Each of the six states carries out its responsibility for the provision of schooling through a centralized Education Department located in the state's capital city. The state educational systems are not identical, but they tend to have many similar features.

Since the first Education Act requiring compulsory attendance was passed by Victoria in 1872, the period of required attendance has slowly increased. Now, children in all states must remain at school until they are 15, except in Tasmania, where the leaving age is 16. The proportionate number of students attending private schools



increases at the secondary level.

The Australian school year begins late in January or early February and ends in mid-December. The long vacation is taken over the Christmas period during the summer months, December to February, and two short vacations in spring and winter divide the year into three terms.

A. Pre-School and Primary Education. A growing number of young Australian children between the ages of two and six attend pre-school centers or kindergartens when they are located within the more populated areas and within easy reach of the children's homes. The centers are maintained by voluntary organizations with financial support from the government. For those unable to attend a kindergarten daily, radio and television sessions are available on the national networks.

The first two or three years which children spend at the primary or elementary level of education are usually in infants' schools or in infants' classes in a primary school.

Although school attendance is not compulsory until the age of six, most children are accepted at age of five so that the early years in primary school are little different from kindergarten education. At about the age of eight, most children pass into the primary school proper. Primary schools, including their infant classes, are conducted five days a week for about five hours a day.

The main subjects in primary education are reading, writing, arithmetic, social studies, and work in English grammar and composition. There is no formal examination at the end of the primary course; progression to secondary school is usually automatic. In general, Australian children spend from six to seven years in the primary grades.

B. Secondary Education. The age of transfer from a primary to a secondary school is usually between 12 and 13. Most secondary schools are coeducational, although separate schools for boys and girls are not uncommon in capital cities, especially if they are private secondary schools.

Until recently, government high schools were organized along traditional lines, offering four- to six-year courses to prepare for the public examinations that would qualify them for entry to universities, teachers' colleges, other tertiary institutions, public service, and commerce and industry. Comprehensive high schools with a broader range of subjects and a common core of basic studies are becoming more frequent. However, there are some high schools in the larger towns and cities which specialize in technical, commercial, and agricultural subjects. There are also Home Science Schools providing two—to five—year courses in home science and commercial subjects. These courses prepare girls for the responsibilities of homemaking and also for occupations they may enter after leaving school, such as teaching, nursing, business, commerce, or branches of public service.

Agricultural schools offer a curriculum of academic subjects along with practical farm training. Courses in agriculture also may be found in the curriculum of some rural comprehensive secondary schools.

Most non-government secondary schools in Australia, usually called private schools, are conducted by or under the auspices of religious organizations. Many of these schools are prestigious institutions which specialize in preparing students for university entrance. Entrance to these schools is often selective, and many have long waiting lists.

A chart on "Grades in Australian Schools, 1969" is included at the end of this section.

C. Secondary Examinations. Internal and external examinations are characteristic of the system. During the course of secondary education, state-wide examinations are taken at two levels. The earlier examination qualifies pupils for entry to trade courses at technical colleges and agricultural colleges, to junior commercial positions in, for instance, insurance and banking, to nursing and secretarial courses, some grades of public service, and to industry. Reflecting a practical and pragmatic Australian philosophical outlook, some students terminate formal education at this level, but increasing numbers are staying in school after the compulsory leaving age and after the intermediate level examination at middle school level. The examination at the end of the secondary school course qualifies students for entry to teachers' colleges and universities. Certain subjects and combinations of subjects are set down as the matriculation requirements by the various faculties of the respective universities.

In most states, the higher or final secondary examination is controlled by a board consisting of representatives from the Department of Education, the universities, non-government schools, and sometimes from other bodies such as teachers' organizations. A brief description of the examinations in each state follows:

New South Wales: For pupils who began their secondary education in 1962 or later, the full secondary course is of six years' length with a School Certificate Examination at the end of the fourth year, age about 16, and a Higher School Certificate Examination (Matriculation) after a further two years. Pupils who leave school before gaining their School Certificate receive a signed statement of scholastic attainment from their school principal.



<u>Victoria</u>: The School Leaving Examination is taken at the end of the fifth year and the Matriculation (from 1970, the Higher School Certificate) Examination at the end of the sixth year. Pupils at approved non-government schools and certain government schools may be accredited for "leaving" by passing internal examinations set by their own schools.

Queensland: The Junior Public Examination is taken at the end of the third year at about the age of 15-1/2. The Senior Public Examination conducted by the University of Queensland is taken at the end of the fifth year, at about the age of 17-1/2, and matriculation is based on results in this examination.

South Australia: The Intermediate Examination taken at the end of the third year, at about the age of 15-1/2, was held for the last time in 1968. The Leaving Examination is taken at the end of the fourth year, and a Matriculation Examination is held at the end of the fifth year.

Western Australia: The Junior Certificate Examination is taken at the end of the third year, at about the age of 15-1/2. Students who pursue a less academic course may take the High School Certificate Examination at this level. The Leaving Certificate Examination is taken at the end of the fifth year, at an average age of 17-1/2, and matriculation is obtained on results gained in this examination.

Tasmania: The Schools Board Certificate Examination is taken at the end of the fourth year, at about the age of 16-1/2, and the Matriculation Examination conducted by the University of Tasmania at the end of the fifth or sixth years.

D. Higher Education. The older universities were established by colonial governments, i.e., when the present states were separate colonies, and the more recently established universities have been set up by state governments or the federal government. Generally, they are modeled on the lines of the Scottish or English provincial universities which were established during the nineteenth century. They are autonomous and secular all having been created by the State and not by any religious body. With the increased pressure of enrollments in recent years, some universities have imposed restrictions on entry to certain faculties, and,in some cases, special quotas have been set. As a result, only about one in three of those who pass matriculation examinations gains admission. Entry has become more competitive in recent years, and this has tended to raise academic standards. While admission to post-graduate courses is not at present subject to entry quotas, practical considerations such as accommodation, staff and facilities may limit the numbers admitted.

The universities and postal addresses are listed below; recent enrollment figures are also shown:

University of Adelaide, Adelaide, South Australia, 5000.	(8,640)
Australian National University, Canberra, A.C.T., 2600.	(3,871)
The Flinders University of South Australia, Bedford Park, South Australia, 5042.	(1,212)
Latrobe University, Bundoora, Victoria, 3083.	(1, 156)
Macquarie University, Eastwood, New South Wales, 2122.	(2,298)
	(14,464)
Monash University, Clayton, Victoria, 3168.	(8,472)
University of Newcastle, Newcastle, New South Wales, 2308.	(2,220)
University of New England, Armidale, New South Wales, 2351.	(4,872)
University of New South Wales, Kensington, New South Wales, 2033.	
University of Queensland, St. Lucia, Queensland, 4067.	(14,418)
Royal Military College, Duntroon, A.C.T., 2600.	
University of Sydney, Sydney, New South Wales, 2006.	(15,655)
University of Tasmania, Hobart, Tasmania, 7001.	(2,652)
University College of Townsville, Townsville, Queensland, 4810.	
(affiliated with University of Queensland)	
University of Western Australia, Nedlands, Western Australia, 6009.	(6,563)
Wollongong University College, Wollongong, New South Wales, 2500.	

Total Australian university enrollment is approximately 102,000.

- E. Other Institutions of Higher Education. Technical Institutes offer training in industrial skills and commercial, artistic and domestic occupations. Courses may be divided into three main types: tertiary courses giving advanced training in technical professions and other fields such as accountancy and art; vocational courses usually leading to the award of a certificate for skilled technical and semi-professional workers; and craftsman or artisan courses of training in the apprenticeship trades.
 - 1. Agricultural Colleges offer a comprehensive course of two or three years leading



- to a diploma of agriculture. There are nine residential agricultural colleges.
- 2. Fine Arts Institutions offer specialized courses in music, ballet, art, etc., which may lead to diplomas. Such a diploma is not generally considered of university level.
- 3. Certain institutions have been granted the status of College of Advanced Education. It is expected that these colleges, in the future, may achieve a position of parity with universities, awarding their own own degrees and providing graduates capable of applying themselves to the problems of industry, commerce and the professions. At present, those colleges developing from the tertiary segments of existing institutions, and those which are entirely new, concentrate less on postgraduate study and research than do universities.

List of Major Institutes of Higher Education (Colleges of Advanced Education are indicated with an asterisk.)

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Ballarat, The School of Mines and Industries, Ballarat, Victoria, 3350.*
Bendigo Institute of Technology, Bendigo, Victoria, 3550.*
Burnie Technical College, Burnie, Tasmania, 7320.
Burnley Horticultural College, Burnley, Victoria, 3121.*
Caulfield Institute of Technology, Caulfield, Victoria, 3145.*
College of Nursing, Australia: Brisbane, Melbourne, Perth.*
Dookie Agricultural College, Dookie, Victoria, 3646.*
Emily McPherson College of Domestic Economy, Melbourne, Victoria, 3000.*
Footscray Institute of Technology, Footscray, Victoria, 3011.*
Gordon Institute of Technology, The, Geelong, Victoria, 3220.*
Hawkesbury Agricultural College, Richmond, N.S.W., 2753.*
Hobart Technical College, Hobart, Tasmania, 7000.*
Kalgoorlie School of Mines of Western Australia, Kalgoorlie, Western Australia, 6430.*
Launceston Technical College, Launceston, Tasmania, 7250.*
Longerenong Agricultural College, Dooen, Victoria, 3378.*
Muresk Agricultural College, Muresk, Western Australia, 6401.
National Art School, East Sydney Technical College, Darlinghurst, N.S.W., 2010.*
National Gallery Art School, St. Kilda Road, Melbourne, Victoria, 3000.
Newcastle Conservatorium of Music, Laman Street, Newcastle, N.S.W., 2300.
New South Wales College of Nursing, Glebe, N.S.W., 2037.*
New South Wales College of Occupational Therapy, Paddington, New Wales, 2021.*
New South Wales Institute of Business Studies, Sydney, N.S.W., 2000.*
New South Wales Institute of Technology, Broadway, N.S.W., 2007.*
New South Wales State Conservatorium of Music, Sydney, N.S.W., 2000.*
Occupational Therapy School of Victoria, Carlton, Victoria, 3053.*
Physiotherapy School of Victoria, Carlton, Victoria, 3053.*
Prahran College of Technology, Prahran, Victoria, 3181.*
Preston Institute of Technology, Preston, Victoria, 3972.*
Queensland Agricultural College, Lawes, Queensland, 4345.*
Queensland Conservatorium of Music, South Brisbane, Queensland, 4101.*
Queensland Institute of Technology, Brisbane, Queensland, 4000.
Roseworthy Agricultural College, Roseworthy, South Australia, 5371.
Royal Alexandra Speech Therapy Training School, Camperdown, N.S.W., 2050.*
Royal Melbourne Institute of Technology, Melbourne, Victoria, 3000.*
Royal Perth Hospital School of Occupational Therapy, Perth, Western Australia.
Royal Perth Hospital School of Physiotherapy, Shenton Park, Western Australia, 6008.
Royal Prince Alfred Hospital Physiotherapy Training School, Camperdown, N.S.W., 2050.*
School of Dental Nursing, New Town, Hobart, Tasmania, 7008.
South Australian Institute of Technology, Adelaide, South Australia, 5000.*
South Australian School of Art, North Adelaide, South Australia, 5006.*
Swineburne College of Technology, The, Hawthorn, Victoria, 3122.*
Tasmanian School of Art, Domain, Hobart, Tasmania, 7000.
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Victorian College of Pharmacy, Parkville, Victoria, 3052.*



Victorian School of Forestry, Creswick, Victoria, 3363.* Victorian School of Speech Therapy, Melbourne, Victoria, 3053.* Wagga Agricultural College, Wagga Wagga, N.S.W., 2650.* Western Australian Institute of Technology, South Bentley, Western Australia, 6102.* Yallourn Technical College, Yallourn, Victoria, 3838.*

4. Teacher Training. There are nine government teachers' colleges in New South Wales, four in Queensland, five in South Australia, two in Tasmania, thirteen in Victoria, and three in Western Australia.

In general, primary and infant, and in some states, junior secondary teacher trainees complete a two-three year course. Students training for service in government secondary schools are generally required to undertake a university degree course followed by a one-year course of professional training, qualifying them for a diploma in education. Specialist teachers of physical education, music, art, manual arts, or domestic science receive from two to five years of training either entirely at a teachers' college or partly at a teachers' college and partly at some institution such as a university, technical college, or conservatorium of music.

IV. GRADING SYSTEM

A. Secondary Education. Generally, a certificate will show that the student has passed in the required subjects. Representative grading systems for the examinations are:

	Honors Pass Fail	and	1st Class 2nd Class 3rd Class Pass
and in Victoria,	beginning in 1	969:	
	Α		80 -100
	В		70 - 79
	С		60 - 69
	D		50 - 59
	E, F, G,	Н	49 - below

School reports for each term's work can be obtained from the headmaster of the school.

B. Higher Education. To complete a bachelor's degree, a student must typically gain credit for nine to twelve units. A unit in an arts subject normally consists of three hours of lectures per week throughout the academic year together with one or more weekly tutorials; in more advanced courses, there may be two or more tutorials each week. In science courses, three hours of lectures and three hours of practical work each week in each of three or four subjects would be close to the norm. In both faculties (arts and sciences), lectures and tutorials or practical work would be supplemented by extensive, independent reading. Bachelor's degree courses in faculties of Arts, Economics/Commerce, and Science are usually of three years' duration with an additional year if an honors degree is taken.

Post-graduate study leading to professional diplomas, bachelor's degree, master's degree, or doctorate is available in all universities. Students with a good first degree can be accepted for such studies, and special units of work appropriate to their research are planned in the particular faculty. The master's degree in arts and science normally requires at least an additional year's work beyond the four years for the honors degree. All Australian universities require at least two years of full-time study or three years of part-time study for the

Degrees may be awarded with First Class Honors, Second Class (A) or (B) Honors, Third Class Honors, or as a Pass Degree.

QUALITY FACTORS ٧.

In primary schools, the Education Departments prescribe syllabuses of instruction, which are drawn up with the assistance of expert professional committees. Emphasis is placed on reading, arithmetic, and social sciences.

Students are usually twelve and thirteen when they enter secondary school. Here the study of foreign languages, technical or commercial subjects begins.



During the course of secondary education, state-wide examinations are taken at two levels. The earlier examination qualifies students for entry into technical colleges, agricultural colleges, and to commercial positions in banking, insurance, etc.

The examination at the end of the secondary level qualifies students for entry to teacher colleges and universities. Certain subjects are set down as matriculation requirements by the universities.

Admission to universities in Australia has become, in recent years, increasingly competitive and, at present, quotas exist for most faculties in the metropolitan universities. Students are selected for admission on the basis of academic merit as shown by the aggregate marks in the Higher School Certificate Examination. Interview reports and separate aptitude tests such as the Scholastic Aptitude Test (SAT) of the College Entrance Examination Boa:d (CEEB) are not generally used, but may come into wider use in the near future.

With regard to academic records and transcripts, in the past Australian universities have tended to issue students typed statements of their academic record; however, recent trend has been toward machine-produced documents. Progress of students is usually assessed on the basis of performance in annual written examinations.

Attainment of a first tertiary qualification usually depends on the satisfactory completion (written examition) of a defined number of subjects. To obtain a bachelor's degree in arts or science, for example, four subjects are commonly the maximum allowed to be taken in one year, and a total of nine to twelve subjects is required to complete the full undergraduate degree program in arts or science. Certain courses, i.e., architecture, dentistry and medicine, require up to six years of full-time study and for these also, bachelor's degrees are the usual entry to professional standing.

At the present time, there is a considerable migration or "brain-drain" of teachers from Australia to Canada. It now appears that an increasing number of these are annually seeking admission to United States colleges for advanced degrees. United States admissions personnel should review credentials carefully to determine the level of entrance to be granted. In the past, insufficient attention has been paid by American university admissions officers in properly evaluating Australian degrees. Greater attention should be paid to the granting of sufficient credit and adequate recognition for "first" or bachelor of arts, science, and commerce degrees, as well as fuller recognition of "post-graduate" degrees.

VI. RECOMMENDATIONS

A. For freshman admission, it is recommended that United States colleges and universities require the applicant to present the following:

Western Australia: The Leaving Certificate (Matriculation), for which students sit at the end of twelve years of schooling at approximately 17+ years of age. This certificate will show five subjects rated 1, 2, or 3.

Queensland: The Senior Matriculation Certificate which is taken at the end of twelve years at approximately 17.5 years of age. This certificate will show five subjects graded 7, 6, 5, 4, 3, 2, 1, with 7 being the highest.

South Australia: The Matriculation Certificate for which students enter at the end of twelve years at approximately 17.5 years of age. This certificate will show five subjects with passing grades being A, B, C, and D, and failing grades being E, F, and G.

Tasmania: The Higher School Certificate, if taken at the end of Form V, would equate to grade 12 at an approximate age of 17 years. This certificate will show five subjects at the Advanced and/or Ordinary level.

B. For undergraduate admissions with possible advanced standing, it is recommended that United States colleges and universities require the following:

New South Wales: The Higher School Certificate (Matriculation) which is obtained at the end of 13 years at approximately 18 years of age. The certificate will show five subjects rated at the 1, 2, or 3 level.

Victoria: The Matriculation Examination (or Higher School Certificate from 1970) which is taken at the end of 13 years at approximately 18 years of age. This examination will show five subjects marked honors, pass, or fail.

Tasmania: The Higher School Certificate if taken at the end of Form VI, which would be the 13th year, at approximately 18 years of age. This certificate will show the Advanced and Ordinary passes.

C. <u>Colleges of Advanced Education</u> (CAE) are below university level. Although these institutions have been authorized by their government to grant degrees, it must be kept in mind that a student may enter this program from a lower level rather than from a matriculated one. Advanced standing credit should be considered on a

course-by-course evaluation as appropriate to the program entered.

The level of entry to the Australian Colleges of Advanced Education are as follows:

Western Australia: The School Leaving Certificate taken at the end of 11 years at approximately 16+ years of age.

Queensland: An internal examination may be taken at the end of the 11th year at approximately 16+ years of age.

South Australia: The School Leaving Certificate, or Leaving Technical Certificate, or Leaving Area Certificate, or Leaving High School Certificate will represent 11 years of schooling at approximately 16+ years of age.

Tasmania: The School Certificate will represent 11 years of schooling completed at approximately 16 years of age.

New South Wales: The School Certificate or Leaving Certificate taken at the end of Form IV or 11 years will allow CAE admission. The student's age at this point will be approximately 16 years.

Victoria: The School Leaving Certificate or the Leaving Technical Certificate may be granted at the end of Form V or grade 12 at approximately 17 years of age.

Pupils at approved non-government schools and certain government schools may be accredited for "Leaving" by passing examinations set internally by their own schools.

D. Teacher-Training admission in Australia requires the same basic admission certificate as required by Australian universities. (See A above for details.)

It is recommended that advanced standing be considered on a course-by-course evaluation for subjects appropriate to the degree objectives.

E. For graduate admission keep in mind that:

- 1. The bachelor's degree in arts, science, or commerce is three to four years in duration, while the bachelor's degree honors is generally of four years' duration.
- 2. A university diploma may be granted after one year of study beyond the bachelor's degree or the bachelor's honors degree. This should be considered post-baccalaureate work, and is equivalent to master's degree programs in the United States.
- 3. Consider a bachelor's degree of first, second, or third class honors to be a degree of excellent to good quality.

Admissions officers who question the quality of credentials presented are advised to request additional examinations such as the SAT (CEEB), the Graduate Record Examination (GRE), or the Admission Test for Graduate Study in Business (ATGSB) as additional supportive evidence.

It is not recommended that an applicant be admitted as a freshman who presents a School Leaving Certificate taken at a level involving less than 11 years of schooling.



GRADES IN AUSTRALIAN SCHOOLS 1969

NEW SOUTH WALES (and A.C.T.)	VICTORIA	QUEENSLAND	SOUTH AUSTRALIA (and N.T.)	WESTERN AUSTRALIA	TASMANIA
, (L)	(2)	(3)	(4)	(5)	(9)
SIXTH YEAR Form VI Higher School Cert. (Matriculation)	SIXTH YEAR Form VI Matriculation Av. Age: 17-8	FIFTH YEAR Grade 12 Senior (Matriculation)	FIFTH YEAR 5th Year Matriculation Av. Age: !7-4	FIFTH YEAR 5th Year (Leaving) Leaving Certificate (Matriculation)	FIFTH & SIXTH YEARS Class A Higher School Cert. (Matriculation)
Av. Age: 17-9	FIFTH YEAR	Av. Age: 17–6	FOURTH YEAR	Av. Age: 17-3	Av. Ages: 16-9 & 17-9
FIFTH YEAK Form V Av. Age: 16-10	Form V School Leaving; Leaving Technical; Girls' Sec- ondary School Leaving	Grade II Av. Age: 16–6	4th Tear Leaving Certificate; Leaving Technical Cert.; Leaving Area Cert.;	4th Year (Sub-Leaving) Av. Age 16–3	Class B School Certificate Av. Age: 15-11
FOURTH YEAR Form IV	Av. Age: 10-8	THIRD YEAR Grade 10	Leaving righ Schol Cert. Av. Age: 16-4	THIRD YEAR 3rd Year	THIRD YEAR
School Certificate Av. Age: 15–11	FOURTH YEAR Form IV Av. Age: 15-8	Junior Av. Age: 15-6	THIRD YEAR	Junior Certiticate; High School Certificate Av. Age: 15–3	Class C Av. Age: 14-11
THIRD YEAR Form II Av. Age: 14-11	THIRD YEAR Form III Av. Age: 13-9	SECOND YEAR Grade 9 Av. Age: 14-6	Statement of Record Setting Out Academic Achievement for three years	SECOND YEAR 2nd Year Av. Age: 14-4	SECOND YEAR Class D Av. Age: 13-11
SECOND YEAR Form II Av. Age: 14-1	SECOND YEAR Form I Av. Age: 13-9	FIRST YEAR Grade 8 Av. Age: 13–5	AV. Age: 13-5 SECOND YEAR 2nd Year Av. Age: 14-5	FIRST YEAR 1st Year Av. Age: 13-4	FIRST YEAR Class E Av. Age: 12-10
FIRST YEAR Form I Av. Age: 13-1	FIRST YEAR Form I Av. Age: 12-9		FIRST YEAR 1st Year Av. Age: 13-5		
PRIMARY	PRIMARY .	PRIMARY	PRIMARY	PRIMARY	PRIMARY
Seven Years of Primary Education Kindergarten Classes 1-6	Seven Years of Primary Education Grades 1–6 (2 years in Grade 1)	Seven Years of Primary Education Grades 1-7	Seven Years of Primary Education Kindergarten Grades 1–7	Seven Years of Primary Education Grades 1–7	Six to Seven Years of Primary Education Kindergarten Grades 1—6

ERIC*

NOTES:

- (1) The full secondary course is available at High Schools, Agricultural High Schools and the Central Schools. The first four years can be taken at Junior High Schools.
- and Higher Elementary Schools offer the first four years, while the earlier years may be taken The full secondary course is available at High Schools. Technical Schools, Girls' Secondary at Central and Higher Elementary Schools, Primary and Group Schools. (7)
- The Full secondary course is offered at High Schools and Secondary Departments in Primary Schools. ල
- Higher Primary, and Special Rural Schools offer the first three years of secondary education. (4) The full secondary course is available at High Schools and some Technical Schools. Area,
- The Full secondary course is available at Senior High and Senior Agricultural High Schools. The first three years of secondary education may be taken at High and Junior High Schools and Agricultural High Schools or at Primary Schools with secondary "tops." (2)
- at the end of Fifth year, but a majority of them take this examination at the end of sixth year. The full secondary course is available at all High Schools. The first years only of this course may be taken at other Area Schools and District Schools. Students may sit for matriculation 9

VII.

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I. CHART OF THE NEW ZEALAND EDUCATIONAL SYSTEM

Age	U.S.A.	School	← Ph.D. — →	new z ea land
25 24 23 22 21 20	Graduate and Professional Undergraduate	20 19 18 17 16 15	M.A. Honors ————————————————————————————————————	University
19 18	<u> </u>	13	High School ——— Graduation	Higher School Certificate
17 16 15 14 13 12 11 10 9 8 7	Secondary School Elementary	12 11 10 9 8 7 6 5 4 3 2	Graduation	VI-Upper) University VI-Lower) Entrance Exam. V School Certificate Exam IV III I Forms IV III I Standards Infant Classes
5 4 . 3	Kindergarten Nursery or Pre–School			Pre-School



NEW ZEALAND

II. BACK GROUND

A. <u>Cultural</u>. The Dominion of New Zealand, a group of islands in the Southwest Pacific, is located approximately 1,000 miles east of Australia. In size, it is somewhat smaller than the state of Colorado. Two-thirds of the total population of two and three-quarter million people live in cities of significant size while 13.5 percent are engaged in agricultural production. New Zealand enjoys a climate similar to that found in the state of Washington.

Europeans discovered the islands in 1642. The inhabitants at the time of discovery were the Polynesian Maoris. Early colonization centered around the establishment of whaling stations. Around 1840, colonists of Scottish and English origin arrived, the settlements of Auckland and Wellington were established, and New Zealand became a British colony. The discovery of gold in 1861 and the ending of the Maori Wars about 1870 led to an increased inflow of new settlers; later it became a self-governing dominion under the British Crown.

B. Educational. New Zealand education, in some aspects, is patterned after that of Great Britain. Early education provided basic primary schooling on a local basis while secondary education was provided in private schools, usually church-controlled. The educational provisions above the primary applied only to a highly select group of children, usually of well-to-do parents. The main objective of the secondary school was to prepare students for university entrance examinations.

In 1877, an Education Act established a system of free, secular, and compulsory primary education to be administered by a central Department of Education. Since 1877, improvements have been made to broaden the educational opportunity available to each child in New Zealand, especially through the extensive development of high schools since 1900. A Minister of Education, a Director-General of Education, and a supervisory staff of inspectors direct the educational pattern of New Zealand. Schools are provided and teachers employed by locally elected education boards. An Officer for Island Education advises personnel who administer the educational program in the Pacific Island Dependencies.

Private schools, many operated by various churches and independent groups as well as public or state-supported schools, comprise the post-primary educational system. Only 16 percent of post-primary pupils attend private schools. Only limited state financial aid is given directly to private schools.

Some significant accomplishments in education have been:

1906 - Opening of the first technical high school day course.

1936 - Abolition of the proficiency examination upon completion of the primary school.

1944 - School-leaving age raised from 14 to 15.

In 1944, the Thomas Committee (a group established to investigate post-primary education) provided a blueprint for the improvement of education. This included broadening the curriculum around a core of academic subjects, raising of university entrance level, and provision of a School Certificate as terminal recognition for students not planning to enter the university.

- 1945 80 percent of those completing the eight-year primary school continued to secondary school. (Today the figure is over 95 percent.)
- 1960 Re-examination of the educational system by an independent commission (Currie Commission Report 1962).
- 1964 Education Act providing present legal basis for free, secular, primary schools and predominantly free education in state secondary schools.

III. EDUCATIONAL SYSTEM TODAY

School attendance in New Zealand is compulsory from 6 to 15 years of age. The majority of children enter primary school at age 5 and remain in school for at least 10 years. The first eight years of the educational system comprise primary schooling. Secondary schooling (also referred to as post-primary) continues through four years of general, prevocational, and university preparatory education. Two basic patterns of elementary-secondary school organization prevail in New Zealand; the 8 - 4 (8 - 5) combination or the newer 6-2-4 (6-2-5) combination which emphasizes the last two years of the primary cycle as "intermediate schooling." In the case



of many students going on to the university and desiring to qualify for government financial assistance, a fifth year of specialized, advanced preparatory study is added, increasing the basic twelve-year pattern to thirteen years.

Primary and post-primary schooling is offered mainly in public institutions. Private institutions or schools comprise a smaller percentage of the student enrollment. For example, in 1966, out of a total of 380 secondary schools, 115 were private with an enrollment of 25,585 out of a total of 162,138. Higher education is conducted almost entirely in public institutions.

Private schools tend to follow the same outward pattern, basic curriculum, and terminology as state schools since their students are prepared for the same type of school certificates and for the same higher education as those in the public schools.

The school year in New Zealand runs from early February to early or mid-December, depending on the level of instruction. The 40-42 week year is usually divided into three terms of about 13 to 16 weeks each with two-week holidays between terms in mid-May and at the end of August, as well as the longer summer vacation (Christmas holiday) in December and January.

A. <u>Pre-primary and Primary Education</u>. New Zealand children may enter kindergarten at the age of 3, and admission to primary school is permissible by law between the ages of 5 and 7. (The majority of the children are in school before the age of 6.)

The full primary course in theory covers eight years of schooling up to approximately age 13, but in practice the time spent by the individual child in completing the program may vary from seven to nine years, depending on a number of factors. Children normally enter school on their fifth birthday and proceed at a speed commensurate with their abilities.

Upper primary or intermediate schooling comprises roughly the seventh and eighth years of schooling in classes now normally designated Form I and Form II. Students in these two Forms are age 11-13.

B. Secondary Education. In the past, public secondary schools in New Zealand have had several different designations based on their administration, control, or the type of emphasis in their programs. These were called state secondary schools, district high schools, technical high schools and, most recently, combined schools. The current trend, however, is for all post-primary schools to be multilateral or comprehensive. Older schools and private schools still tend to follow the traditional academic pattern.

The larger comprehensive post-primary schools in New Zealand generally will offer up to five or six streams or programs: university preparation, a general course, commercial, industrial, agricultural, and home life.

C. Secondary Examinations. The New Zealand School Certificate is an external examination conducted annually in November by the New Zealand Department of Education. This examination is taken after completion of Form V (11 years of schooling), and the student usually writes in four or five subjects. Passes in the School Certificate Examination do not qualify a student for university entrance, as at least one additional year's work and successful completion of the university entrance examination are required for this purpose. A certificate of attainment or a certificate of education has been awarded to a student who does not successfully complete the School Certificate.

Satisfactory completion of Lower Form VI (one year's study beyond the School Certificate) represents about twelve years of elementary-secondary preparation and qualifies the student for the Endorsed School Certificate. This certificate may grant admission to a Teachers' Training College, but this certificate does not necessarily reflect an academic program preparing for university admission in New Zealand.

University matriculation is based on the university entrance examination or its equivalent, representing in general are least twelve years of elementary-secondary preparation. The minimum age of entry to a New Zealand university is 16 years, but the usual age for taking the University Entrance Examination is 17 years, and for the Higher School Certificate, 18 years.

The University Entrance Examination (sometimes taken at Lower Form VI, but usually after Upper Form VI* – 13 years of schooling) qualifies a student for admission to a university or teachers training college. However, a student from an "accredited school" with the principal's recommendation may qualify for university entrance without writing the University Entrance Examination. A system of "accrediting" post-primary schools was started by the Universities Entrance Board in 1944. The status of an "accredited" school in New Zealand is similar to that of an accredited school in the United States.

Approximately 25 percent of the students who enter post-primary schools will write the University Entrance Examination with a little better than half qualifying.

An additional thirteenth year of study in the second year of Form VI (Upper Form VI, post-university

^{*} Upper Form VI now is called Form VII in many schools.



entrance, or scholarship class) is taken by a small number of students who wish to qualify for the Higher School Certificate, and thus become eligible for a Fees and Allowances Bursary. To qualify for the Higher School Certificate, the student must complete satisfactorily a year's course of study beyond university entrance standard, or two years in advance of the School Certificate standard (Form V).

D. <u>Higher Education</u>. All universities in New Zealand are government controlled and were established as separate degree-granting institutions by the Universities Act of 1961. This effected the dissolution of the parent University of New Zealand, which since 1874 had been the sole degree-granting authority. Like the Australian universities, the New Zealand universities were modeled after the Scottish or English provincial universities of the nineteenth century.

Universities in New Zealand are listed below; recent enrollment figures, shown in parenthesis, are approximate.

University of Auckland, Auckland, established 1882.	(9,000)
Victoria University of Wellington, Wellington, established 1897.	(6,000)
University of Canterbury, Christchurch, established 1877; Constituent College:	
Lincoln College.	(5,748)
University of Otago, Denedin, established 1869.	(4,836)
Massey University, Palmerston North - Manawatu, established 1965.	(3,600)
University of Waikato, Hamilton, established 1964.	(508)

The university academic year is from March to November and is usually divided into three terms. Total New Zealand university enrollment is approximately 30,000.

Each of the four older universities provides degree courses in arts, commerce, law, music, and science. Other courses, mainly professional in content, are not available uniformly at all the universities.

Courses for the first degree of B.A., B.Sc., B.Com., B.C.A., B.Agr., or B.Hort. (excluding honors degrees) require a minimum of three years' study; B.H.Sc., B.Agr.Sc., B.Hort.Sc., B.Arch., B.E. (agricultural, chemical, civil, electrical, mechanical), B.Mus., B.Pharm., LL.B., and B.Med.Sc., four years; B.D.S. and B.V.Sc., five years; M.B., Ch.B., six years of study.

Master's courses may be of one or two years' duration and may or may not require a thesis. Advanced post-graduate work (normally Ph.D.) usually involves supervised original work and some tutorial and discussion-type instruction for at least two additional years.

E. Other Institutions of Higher Education. In general, technical education is provided at the secondary level. However, there is a growing interest in higher technical education. The Central Institute of Technology at Petone, Wellington, has been established to develop a college for senior technical work for students throughout New Zealand. Among courses available here are those taken by pharmacists in the first two years of their training. The first year is considered to approximate the medical "intermediate" level of the university, although no provision for university recognition of the work for transfer purposes has yet been announced. Technical institutes have recently been established in all the main centers for tertiary technical training.

The Technician's Certification Authority conducts examinations for the New Zealand Certificates in Engineering, Science, Building, Draughting, and other technical subjects taught in the technical institutes. At the most advanced level of certification, some New Zealand universities may admit to the second year of an engineering degree program.

Teachers' colleges at Auckland, Ardmore, Hamilton, Palmerston North, Wellington, Christchurch and Dunedin are responsible for the training of primary or post-primary teachers. Minimum qualification for entry to a teachers' college is the Endorsed School Certificate. Courses for elementary teachers have been of a two-year duration, but from 1964 a three-year program has been required. The course includes at least 300 to 500 hours practical work (observation and practice teaching) in addition to academic and professional courses. Teacher trainees who qualify for university entrance may do a limited amount of university study for a degree concurrently with their teacher training. Some students spend a third year in specialized study such as music, physical education, or speech therapy.

Most post-primary school teachers enter service by way of the Post-Primary Teacher Studentships which enable them to study full time at a university. They are then required to spend one year undergoing professional training as a teacher. This can be done in the graduate sections of the teachers' colleges at Auckland and Christchurch.

The universities also offer undergraduate and graduate study in education, awarding the Diploma in Education, the Bachelor's, Master's, and Doctoral degrees.



IV. GRADING SYSTEM

A. Secondary Education. Most New Zealand secondary schools issue half-yearly (or term) and yearly reports on their pupils. The mark-levels are not standardized and may vary considerably from school to school. The usual marking pattern in use on the official "Post-Primary School Record" form is:

1 - Very Good (roughly the upper 5 percent of the Form)

2 - Good (the next highest 20 parcent)

3 - Average (about 50 percent of all pupils in the Form)

4 - Passing (about the next 20 percent)

5 - Fail (the lowest 5 percent)

The official New Zealand School Certificate grading scale since 1961 has been in terms of letter grades which are provided on the certificate. These are explained in percentage terms as follows:

A - 80 or above, very good to excellent

B - 65-79, good

C - 50-64, pass

F - Below 50, fail

A student does not pass unless he gains 50 percent on each subject. Under the old system, the student had ta gain a 50 percent average over four subjects in order to pass the School Certificate Examination (after Form V, grade 11).

B. Higher Education. A representative grading system is that of the University of Auckland.

Passing Marks:

A - 75-100 Excellent (1st Class Honors)
B - 65 - 74 Very Good (2nd Class Honors)
C - 50 - 64 Satisfactory - Good (pass)

Failing Marks:

D - 37-49 Unsatisfactory

E - Below 37 Poor

To abtain a university degree, it is important to gain a "pass" mark in the requisite number, spread, and level of subject units. In general, the "B" range of 65-74 percent seems to be that awarded second class honors, and the "A" range of above 75 percent represents first class honors, where these are designated. Honors may indicate concentration in subject-matter area or scholarship, depending on the particular university program.

V. QUALITY FACTORS

Statistics provide one with hints of quality of New Zealand education, or at least of high attrition in which "quality" undoubtedly plays a part.

In 1966, there were 486,905 students enrolled in all New Zealand schools at the primary level; 162,138 at the secondary level; 81,046 in technical institutes, teacher-training and agricultural institutions; and 22,377 in the universities. Compared to the 50 percent of American secondary school graduates who go on to college, not more than 14 percent enter college/university in New Zealand.

The examination system - University Entrance, School Certificate - insures that no one enters a New Zealand university as the result of merely spending four years in a high school in the upper 50 percent of his class! The University Entrance Examination after Lower Form VI and the School Certificate Examination after Upper Form VI clearly indicates that the New Zealand university matriculant has been rigidly selected. The process of selection is designed to eliminate from university matriculation all but a small minority of those completing secondary school. New Zealand universities tend to be more specialized in bachelor degree programs than are American institutions.



VI. SPECIAL CHARACTERISTICS

New Zealand education offers a highly centralized system in which the chartering of universities, the preparation, offering and grading of examinations, and the standards of all schools, both public and private, are subject to government regulation and supervision. Both private schools (almost all religiously oriented) and government schools are noted for small classes and small student bodies. If the schools are coeducational, as most are, the "large" schools (1,000 students and over) are divided, with the sexes segregated. The principle of low teacher-pupil ratios, together with individual treatment for the student, and smaller classes, have contributed significantly to the intellectual development and scholastic background of the average New Zealand student.

Tempered by New Zealand's interest in events in Europe and America, the student's interest in the outer world very likely will be superior. His desire to go abroad, accompanied by a willingness to assume the burdens of seeking education in other cultures, probably reflects an unusual desire to excel, especially in view of the somewhat conservative social nature of New Zealand society.

VII. RECOMMENDATIONS

The generally formal and complex qualifications for degrees and for degree candidacy in American institutions require that years of schooling be carefully considered in assessing New Zealand credentials.

The twelve years of education encompassing primary through Lower Form VI in New Zealand can be equated with the American patterns of 6-3-3 or 8-4. However, while the American high school diploma is either a terminal degree or a college preparatory degree, depending upon the admission standards of American colleges, the nature of the secondary school credentials of New Zealand are more complex. The Endorsed School Certificate is a general diploma which qualifies for admission to the teachers' colleges. Those persons desiring to proceed to universities are required to pass the University Entrance Examination, or equivalent.

Since the New Zealand student will be transferring to a strange environment and because the New Zealand university system makes the same requirement, it is recommended that an American college or university, as a minimum, require successful passing of the University Entrance Examination for admission to sophomore standing. The Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) or similar American tests may be required, although they are not judged essential.

In cases where students have completed the <u>Upper Form VI</u> and <u>also</u> earned the Higher School Certificate or a higher qualification, it is suggested that applicants be granted up to 30 semester hours of advanced credit given on the basis of appropriate subject matter and course content. For applicants from either Lower Form VI or Upper Form VI, admissions officers might request the presentation of the School Report. This document attests to the courses taken and individual grades earned. It will indicate also the relative standing of the applicant within his peer group.

In the case of the six New Zealand universities, one must keep in mind that a B.A. (regular) is a three-year course, while some B.A. (regular) courses and all B.A. (Honors) programs are four years in length, regard-less of whether the student matriculates after Lower Form VI or Upper Form VI.

The granting of graduate standing in an American institution usually depends upon the requirements of the individual department concerned. It should be borne in mind, however, that a candidate who may have entered university after Lower Form VI and after passing the University Entrance Examination will have earned a three-year bachelor's degree after having spent only fifteen years in school, as compared to his American counterpart's sixteen years. The academic excellence of New Zealand secondary education certainly compensates for this factor. When admitting a B.A. (regular) to graduate standing, it may be well either to note the specific content of the courses completed or perhaps to require the Graduate Record Examination (GRE).

In cases where it is relevant, it is recommended that New Zealand master's degrees be accorded at a minimum the same treatment by Ph.D. academic advisors and admissions officers as would American master's degrees.

It must be noted that M.A. programs are one year in length for those who had previously earned a B.A. (Honors); two years in duration for holders of the B.A. (regular).

With regard to the background of graduate applicants, note the hierarchy of degrees given by New Zealand institutions. Teacher-training colleges, agricultural colleges, and other technical institutions, which offer diplomas or other certificates of completion, can be considered for advanced undergraduate standing on a year-to-year basis.

Caveats: Secure the School Report and copies of all national examination certificates. In the case of graduates, insure that admissions offices are aware of whether the student has a B.A. (Honors) or a B.A. (regular) degree (sometimes identified as general).



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CEYLON, INDIA, PAKISTAN

by Leo Sweeney

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Hugh Sarles
James Vaillancourt



5	6	7	8	9	ō	F	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Age
Kindergarten				Elementary						School				Undergraduate				Professional	and	Graduate	U.S.A.
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				TON		JT ARY			Ceylon General Certificate of Education (Ordinary Level)			Cevian General Certificate of Education (Advanced Level)	Colleges Programs	Junior, University,							
									ation (Ordinary Level)			ation (Advanced Level)		. "							

II. BACKGROUND

A. <u>Cultural</u>. Ceylon is a pear-shaped, independent island approximately the size of West Virginia, lying in the tropics some 33 miles southeast of India. The strategic position of this country in the Indian Ocean has deeply affected her history which is, in many ways, a chronicle of foreign invasions.

Until the tenth century A.D., the invaders were usually Aryans from the Hindu civilization of North India; thereafter, for five centuries, the attacks came from the Southern Kingdom of India. From the beginning of the sixteenth century until 1947, Ceylon was a colony of a European power, first of Portugal, then of Holland, and finally of Great Britain. Today, Ceylon is independent and a member of the British Commonwealth.

The population is estimated at 11.6 million, with a projected yearly increase of 250,000. Perhaps more important for this report is that Ceylon has a young population, i.e., 42 percent of the entire population is under the age of 14 and 68 percent is under 25. The people may be classified in a variety of ways. In terms of religion, 64 percent are Buddhists, 19 percent are Hindus, 9 percent are Christian, and 6 percent are Moslems. According to occupation, 50 percent are engaged in agriculture (tea, rubber, and coconut products), 10 percent in industry, and 7 percent in trading. Ethnically, 72 percent of the Ceylonese people are Sinhalese, 10 percent are Ceylon Tamils, 11 percent are Indian Tamils, and 6 percent are Morrs. In the last category, it is significant to note the historical but slowly subsiding hostility between the Sinhalese majority (concentrated in South Ceylon) and the Tamil minority (mostly in the northern and eastern parts of the country), which has provoked disturbances between the two groups as late as 1966.

Since independence, Ceylon has attempted to blend her traditional culture with the technical advantages of a modern industrial civilization. Some of her recent political unrest and internal disturbances can be best understood in that context. Ceylon's future will depend, to a large degree, on the success she has in raising her standard of living (while at the same time lowering the cost of living), in diversifying her national economy, and in reducing the tensions among her social groups.

B. Educational. In the early history of Ceylon, elementary education was a part of Buddhist temple life where children learned to read and write. Higher education was mainly for those who aspired to the monastic life and, therefore, was obtained in the larger monastic centers of learning.

The cumulative effect of the Portuguese, Dutch, and early British colonial rule upon education was the successive establishment of missionary systems which, for all practical purposes, trained a minority, native, elite class for civil service. As a result, the indigenous Buddhist learning throughout the country was all but submerged. However, during the latter half of the nineteenth century the British instituted a series of reforms which did much to improve the quality of education in Ceylon and to preserve some segments of its ancient heritage. Some of the changes were governmental supervision of the mission schools, an increased secularization of the curriculum, the establishment of vernacular schools, and the introduction of a system of grants-in-aid.

During the first half of the twentieth century, the British continued to introduce improvements into the system of education which resulted in what has been described as a "silent social revolution" in Ceylon. When the British relinquished control in 1947, they left behind a stable, educational structure. Later reforms included the following principles:

- 1. The progressive adoption of the mother tongue of the student as the medium of instruction in all schools, beginning from the primary classes.
- 2. The provision of free education to all students in all schools from kindergarten through university.
- 3. The establishment of nearly 50 secondary schools throughout the island, including facilities for practical education.
- 4. The introduction of an island-wide scheme of scholarships to enable pupils to enter secondary schools where residential facilities were available. Consequently, the literacy rate has continued to rise, and the 1963 census report indicated that Ceylon has the highest rate of literacy for both males (79.3 percent) and females (63.2 percent) among the nations of Southeast Asia.

III. EDUCATIONAL SYSTEM TODAY

The educational system of Ceylon, with certain significant modifications, follows the pattern of the British system.

A word of background as a framework for this presentation: in 1960, in an attempt to create more realistic curricula to meet the socio-economic needs of the island, nearly all schools were brought under the direct control and supervision of the Ceylonese central government. This move also established free schooling from kindergarten through university. Within the last 50 years, government expenditures for education have risen from 4 percent to nearly 20 percent of revenues.

Secondary. Since the 1960 legislation referred to previously, efforts have been made to develop the secondary schools into "multi-lateral, multi-purpose Senior Secondary Schools" with diversified curricula. Three main problems in the educational development of Ceylonese secondary schools since 1960 are (1) increased enrollment, giving rise to the problems of lack of space and inadequate teacher-training to meet the needs; (2) a decline in standards of education in the more established schools as the numbers of students increased, and (3) a drop in the standard of the English language as it changed from the medium of instruction to a second-language subject, compulsory in theory rather than in practice.

Examinations. The Ceylon General Certificate of Education (Ordinary Level) Examination, given at the end of the tenth year of schooling, continues to be the largest one conducted by the Department of Examinations. Whereas over 250,000 candidates will appear for the Ordinary Level Examination, only about 10,000 appear for the Advanced Level Examination.

Post-Secondary Institutions. In the General-Technical Education Bill of 1967, the term "further education" is used to designate "...full-time or part-time vocational or cultural education for persons above the age of fourteen who are able and willing to profit by such education in local practical schools, union schools, and night schools established, conducted, and maintained by local authority or a society." This type of education will become increasingly important in Ceylon.

Teacher-training institutes represent two years of study beyond the tenth year of school, a pattern very similar to that which prevailed at earlier United States normal schools.

Higher Education. The Higher Education Act No. 20 of 1966 established a new body, designated the National Council of Higher Education (NCHE). The NCHE was endowed with wide powers and functions with regard to the universities of Ceylon. One of these powers was the administration of the admission procedures for students to the universities. The NCHE then created the Central Agency for Admissions to perform this function. In its work the Agency considers the performance of candidates on the Ceylon General Certificate of Education (Advanced Level) Examination conducted by the Department of Examinations, the number of places available in the universities, the proposed course of study of applicants and their preferences among the universities. The Higher Education Act also created the impetus for the establishment of Junior University Colleges. The accompanying tables of grading scales, used together with the schematic ladder of the educational system, will provide a ready reference for the analysis of transcripts from institutions of higher education in Ceylon.

Examinations. The Ceylon General Certificate of Education (Advanced Level) Examination now serves as the entrance examination to all of the universities in Ceylon as well as to some of the other post-secondary institutions. This examination replaces all earlier entrance examinations. It provides for the selection by the student of four subjects from a grouping in the Ordinary Level Examination. Typically, the four subjects in which the student is examined will be the ones that he subsequently follows at the university. Laboratory practical work is tested as a requirement for successful completion of the Ceylon General Certificate of Education (Advanced Level) Examination.

Institutes of Higher Education (Post-Secondary School). The following listing of institutions should not be assumed to be exhaustive, but rather as representative at the time of compilation.

A. Universities

- 1. University of Ceylon, Peradeniya. (f.1942), University Park, Peradeniya. Faculties of Oriental Studies, Arts, Science, Medicine, Engineering, Agriculture and Veterinary Science, and Education.
- 2. University of Ceylon, Colombo. (f. 1967), Colombo. Faculties of Arts, Medicine, and Science.



- *3. Vidyalankara University of Ceylon. (f. 1959), Kelaniya, Colombo. Faculties of Buddhist Studies, Languages, Arts, Sciences, and Education.
- *4. Vidyodaya University of Ceylon. (f. 1959), Gangodavila, Nugegoda. Faculties of Buddhism, Languages, Arts, Sciences, Public Administration, and Education.

B. Other University-Level Institutions

- Aquinas University College. (f. 1954), Colombo. Courses in Arts, Science, Law, and Economics; School of Business; courses in Agriculture and Technology. Educates students for external degrees of the University of London.
- 2. Ceylon Law College. (f. 1900), Colombo. Controlled by the Incorporated Council of Legal Education.
- 3. Jaffna College. (f. before 1900), Vaddukoddai. Educates students for external degrees of the Universities of London and Ceylon in Arts, Sciences, and Economics.
- 4. Junior University Colleges.** (f. 1969):

Dehiwala	, Kegαlle	Palaly
Galle	Kuliyapitiya	Polgolla

C. Post-Secondary Training Institutes

- 1. Agriculture:
 - a. School of Agriculture, Kundasale.
 - b. School of Agriculture. (f. 1916), Peradeniya.
- 2. Fine Arts:
 - a. College of Dancing and Ballet, Albert Crescent, Colombo.
 - b. College of Music, Albert Crescent, Colombo.
 - c. Government College of Fine Arts. (f. 1953), Horton Place, Colombo.
- 3. Nursing:
 - a. Nursing College at Galle.
 - b. Nursing College at Kandy.
- 4. Social Work:
 - a. Ceylon School of Social Work. Two-year diploma program.
- Teacher Training: (two-year program)
 Teachers Colleges at Adalachchenai, Alutgama, Anuradhapura, Balapitiya,
 Bandarawela, Battecaloa, Bolawalana, Colombogam, Dambadeniya, Eswatta,
 Giragama, Hingurakgoda, Kalutara North, Katukurunda, Kopay, Kottawa,
 Maharagama, Mirigama, Nallur, Nittambuwa, Palaly, Polgolla, and
 Vyanwatta.
- 6. Technology:
 - a. Ceylon College of Technology. (f. 1966), Katubedde. Technological and commercial education.
 - b. Ceylon Polytechnic. (f. 1901). Commercial education.
 - c. Ceylon Technical College. (f.1893), Maradana, Colombo. Trades and commerce.
 - d. Junior Technical Institutes at:

Galle) Jaffna) Kandy)	Commerce, trades, and engineering
Anuradhapura) Badulla) Kegalle) Kurunegala) Ratmalane)	Commerce and trades

^{*}These two universities have a total of 79 "Pirivenas" which have affiliate status.

**See Special Characteristics Section.



e. Senior Technical Institute, Amparai.

f. Technical Training Institute of the Gal Oya Development Board.

Technological and commercial education.

IV. GRADING SYSTEM

Grading system for all universities in Ceylon:

GRADE	MARKS - %	CLASS	REQUIREMENTS
. A	100 - 70%	First	Average of 65% or above, but A grades in at least four papers, others at least C grades (Total number of papers of three—hour duration = 9)
В	55 - 69%	Second Upper	Average of at least 60% A or B grades in at least four papers, others at least C grades
С	40 - 54%	Third	Average of at least 40%, at least C grades in all papers
D	35 - 39%	Reconsiderat of grades	ion for a Third Class pass depending on the districution
E	Below 34%	Not consider distribution of all E's)	ed except in a very unusual case with a still more unusual of grades. (Example: three A's, two B's, the remainder
	r Honors Degree B.Sc. (Chemistry - Sp. Degree	ecial]) – 1 sub	ject as Major ject as Minor – generally expected to sit for one year e the Major subject jects

V. QUALITY FACTORS

In order to obtain the Ceylon General Certificate of Education (Ordinary Level) at the end of the tenth grade, the student needs only six passes, two of which are in religion and his native language. A better student would be one who has a greater number of credit passes in the academic fields important to the United States institutions; the maximum number of subjects a student could offer at one sitting is eight. At the advanced level, the better student would have grades of distinction or credit passes on the Ceylon GCE rather than simply ordinary pass or fail. Again, the better student might present more than the minimum of four subjects at different sittings.

Descriptions of the four degree-granting universities in Ceylon may be found in the Universities Handbook: India and Ceylon 1969. Of the four, the University of Ceylon, Peradeniya, founded in 1942, is the oldest and is considered to be the best in most ways, certainly with respect to its faculties and facilities in science and its library. Sinhalese and Tamil are the designated languages of instruction, although, out of necessity, most science classes are taught in English and use English textbooks at higher levels.

The B.A. (Special) or B.Sc. (Special) at Ceylonese universities denotes intensive education in one subject area as compared with the B.A. (General) and B.Sc. (General). Admission to these special degree programs is based on high marks on the General Qualifying Examination given after the first year. The course for the three-year B.Ed. at the University of Ceylon also requires a high standard on the General Arts Qualifying Examination after the first year.



VI. SPECIAL CHARACTERISTICS

- 1. In January, 1969, six new institutions were established, called junior university colleges. They probably will follow the United States pattern of community and technical colleges by providing post-secondary vocational and technical training, and may be essentially terminal in nature.
 - 2. The University of London GCE (Advanced Level) was given in Ceylon for the last time in 1968.
- 3. The United States Educational Foundation in Ceylon (10 Kenross Avenue, Colombo 4, Ceylon) is willing to answer inquiries about students and schools that are of special concern to United States admissions officers. The Foundation also serves as a testing center for the Scholastic Aptitude Test (SAT) and Achievement Tests (CEEB), the Graduate Record Examination (GRE), the Test of English as a Foreign Language (TOEFL), etc. It will administer any special tests requested by colleges and universities in the United States.

VII. RECOMMENDATIONS

1. The Ceylonese student generally sits for the Ceylon General Certificate of Education (Ordinary Level) at the conclusion of ten years of school. He sits for the Ceylon GCE (Advanced Level) at the end of twelve years. English Language, Religion, Pure Mathematics, and Sinhalese Language are the compulsory subjects. The Ceylonese universities require six passes, at one sitting, as the minimum admission requirement.

It is recommended that the successful passing of four "A" (Advanced) levels constitutes the minimum standard for entrance to freshman status at universities in the United States. Advanced standing or credit is not recommended for "A" level passes. The more selective institutions may want to require grades of "distinuition" or "credit pass" in certain subjects, as opposed to simply grades of "ordinary pass" on the GCE (Advanced Level). The admission officer should request a copy of the official GCE certificate.

2. The four universities give both three—year and four—year bachelor's degrees, and it is recommended that generally only the four—year degrees be compared with the bachelor's from the United States. The workshop participants recommended that three years of credit generally be given for the three—year degrees. However, there were some who felt that holders of the three—year bachelor's might be considered for graduate school admission, especially if other evidence of admissibility were submitted, e.g., high scores on the GRE or Admission Test for Graduate Study in Business (ATGSB). It was also felt that the results of these examinations would be helpful in considering all Ceylonese graduate applicants.

Only those students with overall grades in the upper two categories of the accompanying grading scale chart are recommended for admission. In three-year programs, examination reports are available after the first and third years only; in the other programs, reports tend to be available after each year. Since a Ceylonese bachelor's program may be either three or four years in length, it is recommended that a chronology of the student's education be drawn up, beginning with at least the tenth grade of school (Ceylon GCE Ordinary).

- 3. Students at Aquinas University College and Jaffna College are studying to earn degrees as external students of the Universities of London and Ceylon. Credit for transfer of such work or recognition of bachelor's degrees for graduate school admission may be considered in line with the suggestions given in item 2 above.
- 4. The pirivenas are Buddhist schools at both the secondary and university levels. Seventy-nine of the total of 231 pirivenas are affiliated with the Universities of Vidyalankara and Vidyodaya. Credit from these institutions may be recognized on the same basis as that of the parent institution. The admissions officer should ascertain that the transcript of such work reflects the name of the parent institution with which the pirivena is affiliated.
- 5. There are 23 teacher-training institutes. Since their two-year programs are based on completion of tenth grade only, advanced standing is not recommended. Admission to freshman standing might be considered for applicants who can present other evidence of admissibility, e.g., satisfactory SAT scores, experience, etc.
- 6. Other post-secondary institutions training in agriculture, fine arts, nursing, social work, and technology are not based on secondary schooling in a pre-university curriculum, and it is recommended that their graduates or students generally not be considered for admission to colleges in the United States.
- 7. Since the use of the English language as the medium of instruction in the secondary schools and universities is on the wane in Ceylon, it is strongly recommended that a test of English proficiency such as TOEFL be used.



VIII.

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Education in Ceylon, Volumes I-III. Ministry of Education and Cultural Affairs, Colombo, 1969.

Universities Handbook: India and Ceylon. Inter University Board of India and Ceylon, New Delhi, 1969.

World Survey of Education, Volumes III & IV. UNESCO, New York, 1961, 1966.

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			2	ω	4	ა	6	7	_{&}	9	10	=	12	13	14	15	16	17	8	1,0	20	School Year
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		(10)		\				Primary	Higher		Secondary	mediate	Inter-	B. Com.	B.A./B.Sc/	M.Com.	M.A/M.Sc/		Ph.D.			

Certificates: 12 years - Pre-Professional; Pre-Engineering; First Year Arts, Science and Commerce; and Intermediate, 11 years - Higher Secondary School Certificate (H.S.S.C.); Pre-University (P.U.C.); Pre-Degree; and Indian School Certificate.

10 years - Secondary School Certificate (S.S.C.); Secondary School Leaving Certificate (S.S.L.C.); and High School Certificate (H.S.C.).

II. BACKGROUND

A. <u>Cultural</u>. India is the world's largest democracy, the seventh largest in land mass, and the eighth in the list of the world's industrial nations. She ranks second only to China in population with nearly 500 million people, and more than half of her population is below 18 years of age. Each year an estimated 10 to 13 million people are added, and long-range predictions for the year 2000 call for a total population of one billion people.

The geography and climate vary greatly – and so do her people. Although 80 percent of the population is Hindu, followers of Buddhism, Islam, Christianity, Sikhism, Jainism, and Animism are to be found. Although the people share many common practices and ideas, there are many purely local customs. Although the Constitution recognizes 14 major Indian languages in addition to English, and although India's 17 states were formed on a linguistic basis, there are as many as 250 regional dialects currently in use.

India is several thousand years old, but its modern history only begins in the seventeenth century with the arrival of the British. By the end of the nineteenth century, British control over all of India had been established. Her major policy was directed toward the restoration of order and the collection of revenue rather than the introduction of any innovative policies. Consequently, the history of India until 1947 is largely a chronicle of the imposition of British values and systems upon an Indian society whose strength resided in the interrelated institutions of the village, the family, and religion rather than in political organizations.

However, the effect of these British policies not only unified the country, but also enkindled the spirit of nationalism among the Indians. The great leader in this movement was Mahatma Gandhi who appealed to the deep religious nature of the Hindu. Although he wanted a unified Indian nation, his National Congress Party soon became a Hindu Party. Therefore, the Moslems under the leadership of Mohammed Ali Jinnah demanded that a separate Islamic state also be formed. When independence was granted in 1947, two separate states were established, one Hindu, and the other Moslem.

Since 1951, India has embarked on a series of five-year plans to bring her economic, social, and educational structure up to a level which can support her people in a highly industrial era. Realization of these objectives has been hampered by a slow rate of economic growth, drastic food shortages, and continual border disputes with China and Pakistan, to name but a few. Perhaps more fundamentally, India must decide how the Hindu way of life will accommodate itself to the twentieth century.

B. Educational. In ancient times, India's educational institutions were limited to a chosen few. The master took in students to study under him in his home; here, the emphasis was placed on the moral, ethical and social customs. Gradually more formal institutions developed, including centers of Hindu learning such as Taxila and Kashi, where students from all parts of Asia gathered.

The arrival of the British was the actual beginning of India's educational development. Education under British auspices was conceived to be utilitarian in purpose — to serve the Empire. The British East India Company, which held authority until the mid-nineteenth century, made use of missionary schools to educate a clerical class. As control passed to the British Crown, more efforts were made in developing an educational system which produced civil servants.

The decision to superimpose the British educational structure on the indigenous institutions affects Indian education even today. Native institutions were not allowed to reach their potential. Language problems were never fully overcome, creating a situation whereby the masses have been unable to continue education beyond the primary level due, in past, to differing curricula and language of instruction. Entrance to the university was based on the higher level English system, thus restricting higher education to an elite group. The great number of Indians who went through the English system were attracted to civil service and did not address themselves to Indian problems. The use of the English language, originally conceived as an aid to develop the indigenous culture, had the reverse effect because it tended to reduce both the teaching and studying of all subjects in the vernacular at a time when the vast majority of Indians could not be accommodated into the English system.

III. EDUCATIONAL SYSTEM TODAY

Elementary. Education is free and universal in India. The government's long-range plan is for every child between the ages of 6 to 11 to be in school. The immediate goal for 1970 is 70 percent enrollment, but



Indian School of International Studies, New Delhi (to become the School of International Studies and Diplomacy in the new J.L. Nehru University as an affiliated college)
Indian School of Mines, Dhanbad
Jamia Millia Islamia, New Delhi
Kashi Vidyapith, Varanasi
Tata Institute of Social Sciences, Bombay

These tend to be specialized institutions without the breath of offerings usually expected in a university.

The only institutions that legally can award degrees are the universities established by the states and the Centre, the institutions deemed by the UGC to be universities, and the "Institutions of National Importance" specially empowered by the Parliament to do so. In the last category are nine institutions:

All India Institute of Medical Sciences, New Delhi Hindi Sahitya Sammelan, Allahabad Indian Institute of Technology, New Delhi Indian Institute of Technology, Kanpur Indian Institute of Technology, Kharagpur Indian Institute of Technology, Madras Indian Institute of Technology, Bombay Indian Statistical Institute, Calcutta Post-Graduate Research Institute in Medicine, Chandigarh

Entrance by an Indian student into one of these degree-granting institutions usually is based on his record in his previous education, though some schools such as the institutes of Technology use, in addition, a competitive admissions examination and an interview system. The Pre-University Certificate (PUC), the Higher Secondary Certificate (HSC), or the Senior Cambridge Certificate, signifying eleven years of formal schooling, is the typical minimum requirement for entry into a B.A. on B.Sc. course of study. Engineering programs typically require the same for minimum admission requirements, though specific subjects, percent of marks, and/or division may also be specified for entry to the first year of study. The B.A. and the B.Sc. degrees typically are three-year courses. Thus the B.A. holder has had fourteen years of schooling as a general rule. The M.A. and M.Sc. generally are two-year programs now so that the M.A. holder typically has had sixteen years of formal schooling.

The situation is somewhat different at the Indian Institutes of Technology. Admission is determined by an all-India competition that includes an admission test in May, credential analysis, and interviews. This, in addition to a five-year program toward a B.E., B.Sc. (Engg.) or B.Tech. degree in facilities that surpasses many engineering schools in the United States, usually allows the holder to be considered on an equal footing with the United States Bachelor of Engineering.

The opposite extreme is presented by institutions called "polytechnics," some having "institute" in their names, which must not be confused with the IIT's. The "diploma" course (as contrasted with degree at the IIT's) is designed to produce engineering technicians and not "graduate engineers," and it expectedly has lower admission standards both as to the minimum age and academic qualifications. A student may enter at the age of 15 (and therefore be graduated by age 18 in the three-year course that usually prevails) and with a pass in the Secondary School Leaving Certificate (SSLC), which represents ten years of schooling. The fact that a fair percentage of available seats generally are reserved for members of Scheduled Castes and Tribes, as well as for Backward Classes, also affects the competitiveness of the admission picture.

Another activity of the UGC of interest to the college admissions officer in the United States is the establishment of Centres of Advanced Study. The UGC plans to give "active support and substantial assistance to promising departments in the universities carefully selected on the basis of quality and extent of work already done by them, their reputation and contribution to research, and their potentiality for further development." The realization of "international standards" in specific fields, both in postgraduate (graduate) teaching and research, is another way of describing the objectives. A total of 29 such centres now are in operation. Graduates of these centres may receive extra consideration from U.S. admissions officers.

The Indian universities and the Centres of Advanced Study are listed at the end of this section.



even this will call for a drastic increase in facilities. Primary school enrollment in 1963 was 34.3 million, one and one-half times the corresponding age group enrollment in the United States. In order to have at least a one-or two-room schoolhouse in every village, one and one-half times the number of schools available in 1962 would be required, and that figure is double the number that existed when Indio became independent in 1947.

The primary schools are traditionally grades I through V with free tuition in oll government or local body schools. The typical enrolling age is six, although some stotes permit beginning at age five. The curriculum in the villages is largely the three R's in the native tongue) with some simple crafts and manual activities. Urban schools will also include geography, history, and science.

No western country has achieved mass education in primory, secondary, and higher education levels all at once. For India to attempt to do so while simultaneously combating famine and upgrading its technology explains why available funds are so inadequate for primary education.

Secondary. The Secondary Education Commission in 1953 made a thorough study of this level of schooling. It was noted that an education which is terminal for 90 percent of its students is dominated by preparation for the university matriculation examination. Accordingly, the Commission proposed the establishment of "multi-purpose" high schools offering courses in agriculture, commerce, technology, crafts, etc., as well as arts, sciences, and humanities, to prepare for life instead of university entrance only. Some 2,000 such schools have been established, about 3 percent of the total number of high schools. Further development is hampered by the same financial bind previously described. As yet, only approximately 25 percent of the children between ages 11–14, and approximately 12 percent of the high school age group, are in school.

At the conclusion of grade 10, the student sits for the Secondary School Examination. Students planning to attend the university continue in school for another year to prepare for the examinations. (Note: The Commissions' long-range plans call for upgrading the HSSC to twelve years of schooling.) Students who then enter the university will take one year of preparatory work before taking the examinations shown in the Higher Secondary section of the chart given below as presenting twelve years of schooling.

A chart on "Equivalence of Higher Secondary and First Degree Courses in General Education, 1965–66" is included at the end of this section.

Higher Education. The University Education Commission, appointed in 1948 to suggest improvements in higher education in newly independent India, recommended the establishment of a University Grants Commission (UGC), which was accomplished by law in 1956. The UGC has been allocated funds from the central government to spend them where they are most needed. As a result, more adequate buildings, equipment, libraries, and laboratories have been provided as well as an increase in teocher salaries. It has also fixed maximum teaching loods at 24 hours per week, still discouragingly high by United States standards.

Except for four national universities supported directly by the central government, Banaras Hindu University, Aligarh University, Delhi University, and Visva-Bharati University (a highly specialized school), all universities are established by the state governments. The state governments choose the vice-chancellors (equivalent to university presidents in the United States) and grant aid both to the universities and their affiliated colleges. The language of instruction in the sciences and engineering is English. However, recent political and nationalistic pressures have led to a tendency on the part of many universities to allow lecturing and/or writing of examinations in regional dialects. It is projected that the present trend of de-emphasizing English usage in higher education will continue at perhaps a higher rate, thus there is reason to review an Indian applicant's command of the English language very carefully.

The universities are composed of teaching departments, constituent colleges, and affiliated colleges (listed in order of closest control by the university). All recognized colleges must be connected with a university. However, affiliated colleges are often located several miles from the parent body, not only making control by the parent university more difficult, but also lessening the use made of its library and laboratory facilities by the affiliated students. The great majority are private, some tracing back to missionary origin. Over 2,000 of such affiliated colleges teach and examine, in cooperation with the 77 accredited universities, over a million students out of about 30 million individuals now of college age in India. Certain of the colleges maintain high standards, offering their students an education that would be regarded as excellent in any country.

The UGC has been authorized to designate institutions as ones "deemed to be universities" for degree-granting purposes, eligibility to receive UGC grants and similar purposes. The institutions that have been so designated are:

Birla Institute of Technology, Pilani Gujarat Vidyapeeth, Ahmedabad Gurukul Kangri Vishwavidyalaya, Hardwar Indian Agricultural Research Institute, New Delhi Indian Institute of Science, Bangalore



Post-Graduate Work. Indian master's degrees usually require two additional years after completion of first degree. Particular attention should be given to dissertation or research work involved in the post-graduate program. The degrees of D.Litt., D. Sc., and the like, awarded without research and public examination, make such degrees comparable to honorary degrees. The Ph.D. does not require any course work and normally is awarded to the holder of a master's degree after 2-3 years of research and dissertation under the guidance of a professor. Sometimes a university will award an advanced degree based on research done at a non-academic research institute, e.g., the Central Leather Research Institute, the National Physical Laboratory or the National Chemical Laboratory.

Future Trends. The adoption of the semester system by a number of Indian universities might become the vehicle for some of the badly needed changes in higher education. That the University of Delhi, perhaps India's best all-around university today, goes on the semester calendar effective with the 1969-70 academic year, may induce other universities to follow its lead. How can a mere change in calendar effect significant changes in an institution? Such a mere change obviously will not do so, and in a few places that has been just the case. But, in some places the adoption of the semester calendar has meant the replacement of annual examinations by semester ones, the meaningful use of sessional marks (grades for lecture and laboratory work, term papers, etc.,) in the semester's final marks, and even the revision of the syllabuses (curricula). Should this happen at Delhi, the naiional effect could become one of the long-awaited breakthroughs toward badly needed educational reform.

IV. GRADING SYSTEMS

The examination in Indian universities requires great feats of memory rather than understanding and reasoning. Thus, the students are turned away from the textbooks to the use of canned material and pre-digested handbooks prepared from the previous examinations by the former students. In addition to regularly enrolled "internal" students, the examination often may be taken by an "external" student, one who has not attended classes or laboratories in the subjects examined. It is unfortunate that the results of these examinations are the criteria for grading Indian degrees upon which a United States admissions officer must rely. The award of class or division is normally determined by the total number of percentage received in the final year examination, and generally 60 percent of marks or higher determines First Division of First Class standing in graduation. All Indian research fellowships are awarded on the basis of First Class secured by the graduates, and it should be further noted that the Exchange Bank of India generally is not empowered to issue a Certificate of Exchange for release of funds to a student abroad who received less than 55 percent of maximum marks in his first degree (though these exchange regulations are subject to annual revision). The Class or Division obtained is also a vital factor in recruitment for teaching and government positions. It is a rough evaluation at best to try to work out a meaningful chart for conversion of Indian university grades given in percentage into American A, B, C, D, and E grades. While 60 percent of marks for all practical purposes is a failing grade in an American university, it generally will earn its recipient in India a First Class or Division standing which is often referred to as an "A" grade. A total of 45-59.9 percent generally is required for Second Class, leaving anything below this but above the failing grade of 33 percent, a Third or "Pass" Class or Division degree.

The following equivalency table suggested by some admissions officers may be useful for evaluation purposes:

80% and higher = A+or Distinction

60-79.9% = A or First Division

55-59.9% = B or High Second Division

45-54.9% = C or Third Division

33-44.9% = D or Pass Class

In several universities, including Ranchi and Banaras Hindu Universities, 65 percent of marks or higher is required for First Class. It should be noted, however, that the suggested interpretation outlined above by no means implies that Second or Third Class students are good candidates for study in the United States.



Pattern of School and College Classes (1965-66)*

	Lower Primary	Higher Primary	Sec. Educ.	P.U.C.	Higher Sec.	First Degree	<u>Total</u>
Andhra Pradesh	5	3	3	1	4	3	15
Assam & Nagaland	5	3	4	1	5	3	16
Bihar, Gujarat and Maharastra	ブ	_	4	1	_	3	15
Jammu & Kashmir, Punjab,			•				
Rajasthan & West Bengal	5	3	2	1	3	3	14
Kerala	4	3	3	2		3	15
Madhra Pradesh	5	3	·		. 3	3	14
Madras	5	3	3	. 1	-	3	15
Mysore	4	3	3	1	4	3	14
Oris s a	5	2	4	1	<u> </u>	3	15
Uttar Pradesh	5	, 3	2	-	. 2	2	14

V. QUALITY FACTORS

Useful References. In trying to gather the information listed below as quality clues, the following references should provide most of the information needed:

- 1. UNESCO Warld Survey of Education, Volumes III and IV.
- 2. Commonwealth Universities Year Book. Association of Commonwealth Universities, London.

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- 3. Universities Handbook: India and Ceylon, 1969. Inter University Board of India and Ceylon, New Delhi 1, India. Available through the U.S. Educational Foundation in India, 12 Hailey Road, New Delhi, India.
- 4. Facilities for Technical Education in India, Volumes I and II. Ministry of Education, Government of India. Also available through U.S. Educational Foundation in India.

Clues to the quality of the institution(s) the applicant has attended.

- 1. Age of the institution: While age is not always a reliable indicator of the quality of an institution (as in the case of the IIT's which are newer institutions of quality), generally the newer colleges and universities tend to be weaker than the older, established ones. In checking the age of an institution, the age of an affiliating or constituent college should be distinguished from the age of the parent university.
- 2. Relationship to degree-granting institution: Generally, the student from a university teaching department is likely to be a better student than one with a similar degree from a constituent college; also, the student from the constituent college is likely to be a better student than one with a similar degree from an affiliated college.
- 3. Scope of secondary or undergraduate and graduate programs: The variety of course work available and the depth in which it is affered is an indicator of the quality of the school involved. For example, does it offer only B.A. and B.Sc. degrees, or does it offer master's and doctoral degrees, also? In what areas are these degrees offered?
- 4. Curricular structure and content: Within the framework of the degrees offered, how is the curriculum organized? What papers and examinations are required? What are the syllabuses for the subjects in which the student has taken examinations?
- 5. Library facilities: An older university, such as Delhi University, may have as many as 250,000 volumes in its library, whereas very new colleges may have 15,000 or fewer.
- 6. Faculty quantity and quality: The number of Ph.D.'s in the various departments, the number of faculty in the various departments, and the student-faculty ratio can all provide clues about the quality of the institution.

^{**}U/Bombay has 2-year Intermed.+2-year First Degree.



^{*}Source: Education Commission Report 1964-66, Ministry of Education, Government of India.

7. Admission requirements and competitiveness: How hard is it to get into a given institution? How difficult is it to remain in the institution?

Clues to the quality of the individual applicant.

- 1. Years of formal schooling: For the Indian student it is advisable to insure that he has had twelve years of schooling before allowing him to enter a United States college or university at the undergraduate level; also, it is advisable to insure that he has had sixteen years of schooling before allowing him to enter a graduate program in the United States. (See Recommendations section for types of certificates and degrees that should be required for admission to institutions in the United States at the end of twelve years and at the end of sixteen years.)
- 2. Types of degrees or programs: The types of degrees the student has earned should be closely examined. For example, the B.A. Honours (B.Sc. Honours), although requiring the same number of years of study as the B.A. Pass (B.Sc. Pass) degree, represent a more demanding, in-depth study than the B.A. Pass (B.Sc. Pass). The B.Engg. usually represents five years of study beyond the HSSC, whereas the B.Sc. generally represents only three years beyond the HSSC. (See Recommendations section for guidelines for types of degrees that should be required for admission to U.S. colleges and universities.)
- 3. Latest examination results overall and by special subjects: Individual marksheets for each examination should be examined for overall results on the examination and for results in individual subjects.
- 4. Consistency of examination results: Not only the latest examination results should be checked, but each year's results should be checked to determine the consistency of the student's performance. This should be done from the secondary level on to the highest level attained for which marksheets are available.
- 5. Aptitude and achievement test results: These examination results can be helpful in providing additional information about a candidate's ability and achievement. The use of American examinations must be tended by allowance for the fact that English is not the native language of the student. However, the College Entrance Examination Board (CEEB) achievement tests and the Graduate Record Examination (GRE) advanced tests may prove helpful, as may the SAT-M score and the GRE quantitative score.
- 6. External and internal status: Generally, the internal student (i.e., one who is regularly enrolled in a college or teaching department) performs at a higher level than the external student and presents a stronger academic background. (Indications are usually available on marksheets, showing external status.)
- 7. Quality of references: Although references are not always helpful, they can occasionally provide indications of quality. They should be required and read.

Other considerations.

- 1. Quantity and quality of English: These items should be examined, especially quality of English, which should be measured by the Test of English as a Foreign Language (TOEFL) or some alternative objective test, since the quality of the student's performance at institutions in the United States often depends heavily on his ability to handle English.
- 2. Age: The age of the student at the time he would enter an institution in the United States should be examined as an indicator of adequate maturity for the desired course of study.
- 3. Appropriateness of educational goals: The student should be expected to have a well-defined academic objective. Many Indian students are willing to enter almost any degree program for which they can be admitted.

Relation of quality factors to the characteristics of the particular institution in the United States. It should be remembered that the quality demanded of Indian students should be related to the United States institutions' own particular standards and experience with these students. No absolute standards should be inferred for use by all institutions in the United States. It is expected that variations in requirements and application of the quality clues listed above will occur for different institutions.

Institutions of particular quality. The following is a list (by no means exhaustive) of strong Indian universities, teaching departments, and colleges:

The UGC Advanced Centres of Study,

Benares Hindu University's Departments of Ceramics, Mechanical Engîneering, Metallurgy, and Physics.

Bombay University's Dental, St. Xavier's, and Wilson Colleges, and the Departments of of Chemistry, History, Physics, and Psychology.

Calcutta University's Presidency College und the Departments of Chemistry and Physics.



Delhi University's Miranda House and St. Stephen's Colleges, and Departments of English, Mathematics, Botany, and Business.
Gujarat University's Department of Architecture.
Jadavpur University's Department of Mechanical Engineering.
Madras University's A.C. Engineering and Presidency Colleges.
Roorkee University's Department of Civil Engineering.
Indian Agricultural Research Institute, New Delhi.
Indian Institute of Science, Bangalore.
Indian Institutes of Technology, New Delhi, Bombay, Kanpur, Kharagpur, and Madras.
Indian Institutes of Management, Ahmedabad, and Calcutta.
Indian Institute of Social Sciences, Bombay.

VI. SPECIAL CHARACTERISTICS

There are several problems special to Indian education of which those involved in admitting Indian students to the United States institutions ought to be aware:

The Examination System Problem. Still dominating the Indian educational system is the external examination. In many instances, it is based on syllabuses that are one to two decades behind the times. The rigidity of the questions require the student to remember only specific details; often, a student should be able to remember only specific details; often, a student should be able to predict at least 50 percent in any given year simply by reviewing the last several year's examinations. In addition, there is high subjectivity in the grading of the examinations. Also, it is generally the case that Indian students, since they must only sit for periodic examinations (usually yearly), study one—third to one—fifth as much as United States students.

The English Language Problem. Recently, India has begun to move away from the use of English as the prime language for study at the bachelor's level. It is not unusual now for a student to write his external examinations in his regional language; and, increasingly, classroom instruction is in his native tongue (which is rarely English). Only in the mathematics and science areas is English usually retained at this level. Also, at the primary and secondary levels, regional languages are increasingly becoming the medium of instruction (except for mathematics and sciences). Only at the master's level is English still the predominant language of instruction. Whether the trend to the vernacular continues remains to be seen. One thing is clear, however: the quality of English is deteriorating and will continue to do so.

The Population Problem. The population of India (nearly 600 million) is increasing by an estimated ten to thirteen million each year. This has already created overcrowded classes, which in turn has led to colleges opening up all over India. These new colleges often lack facilities, libraries, and adequately trained faculty. As a result, academic standards have deteriorated in some of these newer institutions. Often these new colleges have libraries that would not compare favorably with some elementary school libraries in the United States. Since books are scarce, lectures may be read by the instructor for almost rote copying by the student.

Some Bright Spots. The organization of the University Grants Commission (UGC) to coordinate university education has been helpful. It has established centres of advanced study, visited universities, made grants to outstanding institutions, and has established objectives of international standards in specific subject areas. Also, the quality of the engineering, medical, and agricultural programs has been of high quality at many Indian schools, particularly the Indian Institutes of Technology, All-India Institute of Medical Sciences in New Delhi, the Indian Statistical Institute in Calcutta, the Post-Graduate Research Institute in Medicine in Chandigarh, and the Indian Institutes of Management in Ahmedabad and Calcutta.

VII. RECOMMENDATIONS

1. Official records (originals or copies of originals as certified by a school or government official) should be required for each examination the student has taken, beginning with the Secondary School Certificate (SSC), or its equivalent, for students applying for either undergraduate or graduate admission. These records should indicate the certificates issued after each examination as well as the marksheets showing the individual subjects in which the student was rested, the grades earned in those subjects, and the division or class received in the examination as a whole. If there is a "gap" in the credentials, the reviewer should request to have the missing material, since students may be reluctant to submit failing credentials or make certain that an examination was not taken that year or previously.



- 2. "Total" figures and percentages on the marksheets should be checked for accuracy.
- 3. A syllabus, course sheet, university catalog, or statement from the student about the content of each subject covered is desirable. For admissions decision and placement purposes, a syllabus should be required.
- 4. Applicants for freshman status should have completed twelve years of schooling, as represented by at least the Pre-Professional Examination, Pre-Engineering Examination, first year of the B.A., B.Sc., or B.Com., or the Intermediate Examination. Admission at the Secondary School Leaving Certificate (SSLC), the Secondary School Certificate (SSC), the High School Certificate (HSC), or the Matriculation Certificate levels, which represent only ten years of schooling, is not advisable. Nor's it generally advisable to admit at the Higher Secondary School Certificate (HSSC), Pre-University Certificate (PUC), Senior Cambridge, Indian School Certificate, and Pre-Degree levels, which represent only eleven years of formal schooling at most.
- 5. Applicants for graduate admission should have completed sixteen years of schooling, as represented by the Indian M.A., M.Sc., M.Com., M.Ed., B.Engg., B.Tech., and B.Sc. (Engg.). Students holding the B.Educ., B.Teaching, or B.Lib.Sc. (all of which usually require one year of study beyond the first degree) normally should not be considered for graduate study. Diplomas in Engineering from polytechnic institutes, which are designed to train technicians and not engineers, should not be accepted for graduate study. The graduate of a diploma course from a polytechnic institute should be admitted only at the freshman level with the possibility of advanced placement through proficiency examinations.
- 6. The recommendations given in 4 and 5 above represent guidelines, and exceptions may be made. However, it is recommended that exceptions be made only where they might be made under similar circumstances for students of the United States.
- 7. Applicants at either the undergraduate or graduate levels with Third or Pass Division records should not normally be considered for admission, especially in those cases where the last examination or the average record has been at that level. Low Second Division passes in the sciences, engineering, and mathematics represent risks, especially where Second Division is the lowest passing level awarded, as is often the case. High Second Division applicants, especially in the humanities and social sciences, usually deserve further consideration since that is often the highest level awarded in these areas. First Division applicants in all fields deserve consideration.
- 8. Care should generally be taken to insure that the Indian student is at least as mature and chronologically as old as United States students selected for the same program.
- 9. The Indian student's educational objective should be considered carefully to insure that he is clear about it and to insure that the institution to which he is applying can meet that objective. An essay or brief written statement describing his educational objective might be required of each student in this regard.
- 10. The student's ability in English ought to be assessed carefully by some objective test, preferably the Test of English as a Foreign Language (TOEFL).
- i1. It is recommended that the results of tests such as the Scholastic Aptitude Test (SAT) (for undergradu-ates), or the Graduate Record Examination (GRE), or the Admission Test for Graduate Study in Business (ATGSB) (for graduate applicants) be required to provide additional information. Requiring the Advanced Test of the GRE in the student's area of concentration also should be given serious consideration, particularly in those areas where there is some doubt about the student's admissibility.
- 12. For applicants whose credentials precede the early 1960's, reference should be made to the AACRAO World Education Series, Volume on India, 1964.

UNIVERSITIES IN INDIA - 1970

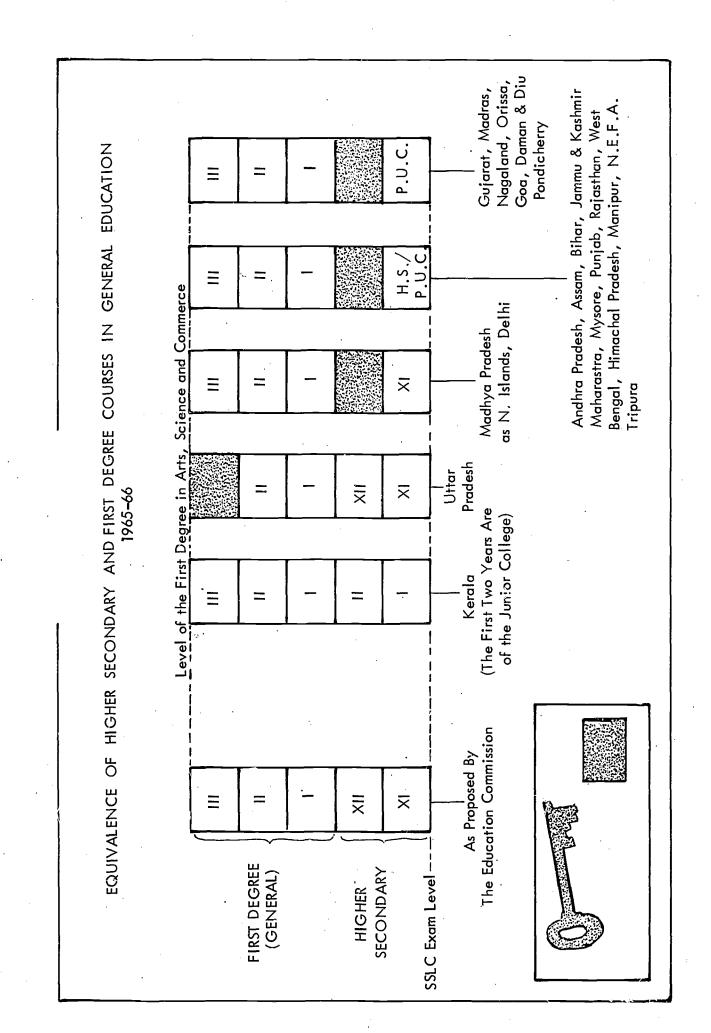
- 1. Agra
- 2. Aligarh
- 3. Allahabad
- 4. Andhra Pradesh Agricultural
- 5. Andhra
- 6. Annamalai
- 7. Awadesh Pratap Singh
- 8. Banaras
- 9. Bangalore
- 10. Baroda
- 11. Berhampur
- 12. Bhagalpur
- 13. Bihar
- 14. Bombay
- 15. Burdwan
- 16. Calcutta
- 17. Calicut
- 18. Delhi
- 19. Dibrugarh
- 20. Gauhati
- 21. Gorakhpur
- 22. Gujarat
- 23. Gujarat Ayurved
- 24. Guru Nanak
- 25. Haryana Agricultural University
- 26. Indira Kala Sangeet
- 27. Indore
- 28. Jabalpur
- 29. Jadavpur
- 30. Jammu & Kashmir
- 31. Jawaharlal Nehru Krishi Vishwavidyalaya
- 32. Jiwaii
- 33. J.L. Mahru University
- 34. Jodhpur
- 35. Kalyani
- 36. Kameshwar@ngh Darbhanga S.V.V.
- 37. Kanpur
- 38. Karnatak
- 39. Kerala

- 40. Kurukshetra
- 41. Lucknow
- 42. Madras
- 43. Madurai
- 44. Magadh
- 45. Marathwada
- 46. Meerut
- 47. Mysore
- 48. Nagpur
- 49. Naharashtra Agricultural
- 50. North Bengal
- 51. Orissa University of Agriculture & Technology
- 52. Osmania
- 53. Panjab
- 54. Patna
- 55. Popna
- 56. Punjab Agricultural
- 57. Punjabi
- 58. Rabindra Bharati
- 59. Rajasthan
- 60. Ranchi
- 61. Ravi Shankar
- 62. Roorkee
- 63. Sambalpur
- 64. Sardar Patel
- 65. Saugar
- 66. Saurashtra
- 67. Shivaji
- 68. S.N.D.T. Women's
- 69. South Gujarat
- 70. Sri Venkateswara
- 71. Udaipur
- 72. University of Agricultural Sciences,
 Bangalore
- 73. U.P. Agricultural
- 74. Utkal
- 75. Varanaseya Sanskrit V.
- 76. Vikram
- 77. Visva-Bharati

CENTRES OF ADVANCED STUDY IN INDIAN UNIVERSITIES

Uni	iversity		partment Recognized as ntre of Advanced Study	Subject Field
1.	Annamalai		Marine Biology Linguistics	Marine Biology Dravidian Linguistics
2.	Aligarh	1.	History	Medieval Indian History
3.	Baroda	1.	Education	Education
4.	Banaras	1.	Philosophy	Indian Philosophy
5.	Bombay	2.	Economics Mathematics Chemical Technology	Public Finance and Industrial Economics Pure Mathematics Applied Chemistry
6.	Calcutta	2.	Mathematics Radiophysics and Electronics Ancient Indian History and Culture	Applied Mathematics Radiophysics and Electronics Ancient Indian History and Culture
7.	Delhi	2. 3. 4.	Physics Chemistry Botany Zoology Economics	Theoretical Physics Chemistry of Natural Products Plant Morphology and Embryology Cell Biology and Endocrinology Economics Development and Economic History
8.	Indian Institute of Science, Bangalore	1.	Bio-Chemistry	Proteins, Lipids and Vitamins
9.	Madras	2. 3.	Physics Botany Philosophy Mathematics	Crystallography and Bio-Physics Plant Pathology and Mycology Advaita and Allied Systems of Philosophy Pure Mathematics
10.	Osmania	1.	Astronomy	Astronomy
11.	Panjab		Geology Mathematics	Himalayan Geology and Palaeontology Pure Mathematics
12.	Poona	2.	Economics (Gokhale Inst.) Linguistics (Deccan College) Sanskrit	Agricultural Economics Applied Linguistics Sanskrit Literature
13.	Saugar	1.	Geology	Structural Geology and Geomorphology
14.	Visva—Bharati	1.	Philosophy	Metaphysics







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I. CHART OF THE REPUBLIC OF PAKISTAN EDUCATIONAL SYSTEM

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Graduate Graduate A School Year Professional A 19 117 117 117 118
Graduate Graduate 3 Professional 1 17
Graduate Graduate Graduate 3 19 School Year School Year
School Year
School Year

10 years - Secondary School Certificate (S.S.C.). Also referred to as Matriculation Examination. Leaving Examination or Secondary School Leaving Examination.

PAKISTAN

II. BACKGROUND

A. <u>Cultural</u>. The Republic of Pakistan consists of two provinces separated at the nearest point by approximately 200 miles across northern India. West Pakistan and East Pakistan differ greatly from each other in geography, resources, cultural backgrounds, economy, and languages, but they are unified by one great religion, Islam. It is estimated that of her 115 million population, 87 percent are Moslem. It should be noted that the predominant language in East Pakistan is Bengali, and it is proposed to become the official language; while Urdu, a related language, is proposed to become the official language in West Pakistan. English will remain as the official language until 1975.

Prior to 1940, the country shared the common history of India and the British colonial rule, but after that date we can trace her emergence as an independent state. In 1947, Pakistan was established as the world's largest Moslem state. However, the state has not attempted to force Islamic practices throughout the nation which also includes Hindu, Buddhist, and Christian minorities.

Since its creation, Pakistan has attempted to increase the industrialization of a predominantly agricultural state. Hampered by a lack of natural resources, skilled labor, transportation facilities, and ready markets – to name but a few problems – she began a series of five-year plans in 1955 to raise the economic standards of the country. However, political unrest, food shortages, an ever-increasing population, boundary disputes with India over Kashmir, and political movements in East Bengal have all contributed to slow down the anticipated growth rate. At present, it appears that Pakisian will continue her efforts to raise the standard of living by attracting foreign investment capital, by obtaining a favorable balance of trade, and by producing sufficient food supplies to meet the demands of her people.

B. Educational. Pakistan, like the rest of the Indian sub-continent, has been greatly influenced by the educational philosophies and systems left by the Hindus, Moslems, and British. While their importance cannot be overestimated, this report will focus on Pakistan's educational development since independence. One of the most significant problems that she had to face in 1947 was the creation of an educational system for a country that was nearly 86 percent illiterate. The central government became actively involved in efforts to coordinate and improve educational facilities and to relate them to the Islamic way of life, even though the provinces enjoyed autonomy in the field of education.

The quantitative growth that has taken place from 1947 to 1961 will serve to indicate the enormity of the problem to provide just the necessary physical facilities. The number of primary schools increased from 38, 122 to 51,200; the enrollment increased 57 percent from 3,643,000 to 5,604,833. The growth at the secondary level was smaller, particularly in the number of new schools, but the enrollment rose from 916,000 to 1,179,000, an increase of 29 percent. The number of colleges of the liberal arts type grew from 90 to 221, and the enrollment rose from 36,000 to 124,864, an increase of some 247 percent. However, the development of higher educationhas been uneven in quality, especially in East Pakistan. In a 1960 survey, it was found that only 69 percent of the 53 degree colleges in that area had permanent buildings of one kind or another, that the average number of books in the college library was only 6,344, that only 13 percent of the students enrolled were in science courses, and that the failure rate on the university examinations was on the average of 50 percent. Finally, the three universities that existed in Pakistan at independence increased in number to 10 with a current, total enrollment of 12,685.

III. EDUCATIONAL SYSTEM TODAY

The system of education in Pakistan is nationally organized, but due in part to the geographic division, much of the administration of the system falls under the Education Secretary who heads the Education Department in each of the two provinces. The provincial governments directly administer the system while the Central Ministry of Education holds less direct control through general policy-making, coordinating and advising functions. In essence, it is a state system of education operating within guidelines issued by a national government.

Growth of educational planning and development has increased enormously in the 1960's. The national budget allocation has jumped from \$50 million in the 1956-60 Five-Year Plan to \$230 million, and \$500 million in the 1960-65 and 1966-70 Five-Year Plans, respectively. The provincial governments have put similar emphasis on improving their systems so that total government expenditure reached \$156 million in 1966-67 alone (six times



the total of the First-Five Year Plan begun in 1955), and represents 13.2 percent of the Pakistan Gross National Product.

The impact of this support has greatly improved conditions; however, many primary schools are still primitive in construction and suffer from a lack of basic educational materials and a shortage of qualified teachers. Learning at all levels tends to be largely rote memorization of lectures. Secondary education fares better due to its past history of private and local support. Rural areas have suffered from a lack of secondary facilities in that secondary schools tended to develop in larger population centers. Girls' schools are even fewer in number in rural areas, but they have been established in almost all areas and are well-attended.

The various government agencies have begun, however, to attack the problems of illiteracy, poor facilities and low standards with a particular emphasis on technical, vocational, and primary education.

A. Primary Education. Primary education normally begins at age 6, although a small number of preprimary or kindergarten schools exist. The primary stage is normally of five years duration, and the language of instruction is in either of the two notional languages (Urdu, Bengali) or in one of the three regional tongues (Pushtu, Punjab, Sindhi). Usually those who come from urban schools will study in a notional language while rural areas tend to teach in a regional medium.

As part of the program for achieving universal and free education, the government is committed to providing primary education to 70 percent of the age group by 1970. It is doubtful that this goal will be reached in time, as it means a rise from 62,000 primary schools in 1967 to 108,500 by 1970. The current growth rate has been far short of what is necessary to achieve this goal.

B. Secondary Education. Secondary education is composed of two levels: Secondary (formerly the middle and secondary schools) and Higher Secondary (formerly the Intermediate School). At the Secondary level priority has been given to the introduction of Agriculture, Industrial Arts and Crafts, Home Economics, and Commercial courses among others, to meet the vocational and technical needs. In addition, facilities are being provided which will allow the compulsory teaching of Science and Mathematics. Upon completion of this five-year sequence, a Secondary School Certificate (SSC) is awarded and is often referred to as Matriculation. The SSC is the qualification for entry into clerical positions, and a good part of the holders terminate their education at this point.

Higher Secondary education, grades 11 and 12, is open to those with the SSC. These schools, like the Secondary Schools, are free and may be supported by the provincial, local, and central governments separately or, more typically, in combination. Private support is minor today. The Higher Secondary Schools or Intermediate Colleges, as they are often called, are college preparatory and, for the most part, instruction is in the two national languages with English as a compulsory subject, as in the Secondary Schools. Formerly, this stage was conducted in Intermediate Colleges under the aegis of the university. This authority has been shifted to one of the eight Intermediate and Secondary Education Boards on largely educational psychology grounds, but also to allow them to respond to changes independently of the universities. Curriculum and method have not, in this latter regard, changed significantly.

At the completion of Higher Secondary, the Higher Secondary Certificate (HSC) or, in some cases, the Overseas Higher School Certificate will be given. Either of these certificates allows entry to university studies. In examinations at all levels in Pakistan, attrition due to failure sometimes reaches 50 percent. It would be wrong to assume that this is due to an elite educational sorting process, but rather it is the result of deficiencies in the educational system.

- C. Technical and Vocational Education. Trade or vocational classes are available and instruction, in the past, has been conducted in separate facilities. These mograms are being slowly added to the secondary school curriculum. Classes occur in grades 9 and 10, with a certificate being awarded after grade 10. Training can continue in the polytechnics which offer three-year diplomas in many fields. Requirements for admission, promotion, and diplomas are not severe, and most graduates do not go on to university study.
- D. Teacher-Training Institutions. Teacher-education certificates are awarded after varying periods of study for employment at the primary and secondary levels through teacher-training schools and teachers' colleges.

The teacher-training schools admit students after they have passed the Secondary School Certificate (SSC) or the Higher Secondary Certificate (HSC) examinations. The graduates of teacher training schools are considered qualified to teach in lower secondary or primary schools. The teachers' colleges require a bachelor's degree in arts or science for admission. Nearly all higher secondary schools now require their the bachelor's degrees both in arts or science and in education.



E. University Education. Currently, twelve universities operate as autonomous or independent institutions. With the current emphasis on the vocational-technical aspect, special universities have been or are being developed in agricultural and engineering fields. In addition, colleges and departments in the traditional universities are being developed and expanded. The universities are established under provincial acts, although the University of Islamabad was founded in 1965 by the central government as a post-graduate institution.

The universities are composed of teaching departments within the institution itself, and constituent and affiliated colleges. The latter two account for perhaps 80 percent of the student enrollment, and the affiliated colleges the greater part of that. Teaching departments are under the direct control of the university and, in general, afford the best facilities and faculty. Constituent colleges are under a greater degree of control by the university than the affiliated colleges through faculty appointments and fiscal ties. The affiliated institutions are fairly independent; the most important aspect of their relationship with the university resrs with the role of preparing students for the university examinations. In some cases, a hierarchy of quality may be claimed, but many affiliated colleges are schools of high quality.

The length of the first degrees will vary, but generally the B.A. (Pass), B.Sc. (Pass), B.Com. (Pass), and B.Sc. in Home Economics are two-year programs after the HSC. The B.A. (Honours), B.Sc. (Honours), B.Com. (Honours), and B.Pharm. are among the three-year degrees. Honours degrees are generally not offered at the constituent or affiliated colleges. First degrees in Engineering are typically four years, and the B.F.A., M.B.B.S. (Medicine), and B.D.S. (Dentistry) are five years in length. Variations in years spent pursuing the degree may occur, and a source such as the Commonwealth Universities Yearbook (listed in the bibliography) should be consulted.

The M.A. and M.Sc. degrees will be one or two years in duration, depending on whather the bachelor's degree was Honours or Pass respectively. The B.Ed., B.P.Ed., and LL.B. are second degrees, and a variety of other master's degrees are available as one—or two-, ear programs. Completion of these second degrees will likely total sixteen years of formal education. Further degrees through the doctorate are offered, but the D.Litt., D.Sc., and LL.D. may also be honorary.

Examinations normally are offered each year for first and second degrees. In the two-year M.A. and M.Sc. degrees, the first examination is termed "previous" and the second one "final." In some cases, master's degrees will indicate Group A or B, meaning no thesis or thesis required, respectively.

The medium of instruction in Pakistan universities is still English, and examinations are conducted in English. The ability of teachers and students will vary greatly, however, and grades in English subjects are not a good indication of proficiency.

IV. GRADING SYSTEM

Marks at all levels are usually given in divisions:

 Division I
 60% and better

 Division II
 45-59%

 Division III
 33-44%

 Fail
 Less than 33%

Marksheets (transcripts) will often indicate both the division awarded and the percentages necessary to obtain each level. A few master's and professional degrees vary by eliminating Division III or by not awarding divisions at all. On occasion, donation points will be given to a candidate who lacks points to obtain the next highest division. Sessional or classroom marks are included in the grade, but they represent a minor portion of the total marks. In at least one institution, this has been abandoned due to abuse by teachers. In any event, these grades seldom represent more than 4-5 percent of the total marks. In science subjects, theoretical and practical (laboratory) marks are entered and both are added to the total. Care should be exercised in distinguishing between an "Honours" or "Distinction" awarded for a single subject and for the entire degree. At some institutions, the results of the final year accounts for perhaps 75 percent of the marks used to determine the degree division rather than the student's entire record.

Direct conversion to the American grading system is not easily done on an absolute basis. However, there was a consensus among the workshop participants that a high second division represents the lowest level at which admission is normally granted. Of assistance in determining the actual value of a candidate's marks is a statement as to his position among those taking the university-wide examinations. While this is not always available, such statements can be useful if they indicate a high position in a large population.



V. QUALITY FACTORS

Factors bearing on the quality of education in Pakistan can be broken into two general classifications, institutional and individual.

1. <u>Institutional</u>. The age of the institution is of considerable interest in that it gives some quality clues. The older institution is generally the more prestigious, in that it can attract greater financial support, better facilities, and more extensive libraries. There are twelve universities in Pakistan, five in East Pakistan, and seven in West Pakistan. Most of the universities have a considerable number of constituent and affiliated colleges, the constituent college being the more intimately connected with the parent university. Most students are enrolled in the constituent or affiliated colleges, where their formal education is received in preparation for the annual examinations given by the universities. Hence, care should be exercised to determine the relationship of the affiliated college to the degree-granting institution.

The scope of secondary, undergraduate, and graduate programs of the institution as well as the curriculum structure and content will aid in determining quality. Those schools offering degrees beyond the first degree are generally of higher quality. One may look at admissions practices, competitiveness for available openings, grading practices and, if possible, distribution of grades to help establish quality. The composition of the faculty as to the number of academic degrees will also yield quality clues. Much of this information is available from one or more of the publications listed in the bibliography.

2. Individual. Individual quality clues assisting in the evaluation include such items as the total number of years of formal education and examination results, not only year by year, but also by subject. Consistency of examination results is very desirable. The type of degree, such as "honours," also indicates quality. Scores on aptitude and achievement tests such as the Scholastic Aptitude Test (SAT), Admission Test for Graduate Study in Business (AT GSB), and the Graduate Record Examination (GRE) can also be useful.

VI. SPECIAL CHARACTERISTICS

Pakistan has one of the highest birth rates in the world, a fact which puts extreme pressure on its education system. Unlike some other countries, Pakistan has been somewhat successful in resisting political pressures to admit everyone seeking admission; however, the accommodation of large numbers of students has had an adverse effect on the quality of education. The population explosion has caused a shortage in teachers in terms of numbers and quality. The desire of the country is to maintain a pupil-teacher ratio of 40 to 1 in the Primary and Secondary levels, and 50 to 1 in the Higher Secondary level. These shortages also are the result of the inability of the teaching profession to attract and retain enough people of high ability because of low salaries and inadequate conditions.

With the emphasis on the "examination system," any efforts to improve the curriculum to achieve higher goals have met with the traditional resistance of teachers to set aside their traditional concepts and carry out the new. The tendency is to gear instruction to meet the needs of the annual examination and nothing more. It is not unusual for 40 to 50 percent of those appearing for an examination to fail. This is a well-recognized problem, but a solution does not appear to be in sight. To solve the problem would require a major change in the entire educational system.

A problem in higher education is the imbalance of enrollment. For a developing country, Pakistan has much too small a percentage of its students enrolled in the sciences, engineering, medicine, and agriculture. As the pool of "unemployed educated" grows in Pakistan, it might be argued that the overall enrollment in higher education is not balanced according to the national needs.

The affiliated colleges present yet another problem. Innovation is ruled out due to pressure to meet the annual university examination. They are unable to attract the better faculty members due to their lack of advanced-degree programs. They are also less successful in controlling enrollments than are the teaching departments of the universities. Their libraries are small and their laboratories lack equipment.

Problems such as these should be kept in mind as one evaluates credentials from this country.

VII. RECOMMENDATIONS

- 1. It is strongly recommended that complete and official credentials be required before an evaluation is completed. This should include at least marksheets for every year from the SSC on, results of each examination, certification of all degrees or certificates earned, and English proficiency, financial, and health statements.
- 2. It is recommended that the chronology of the applicant be checked. Any "gaps" in years should be checked, as it is a common practice for the years of schooling which have been failed to be omitted.



- 3. English proficiency should be determined by the Test of English as a Foreign Language (TOEFL).
- 4. In evaluating marksheets, it is recommended that each year be considered separately for consistency as well as the Division or Class of the certificate or degree. In some instances, this Division or Class reflects only the results of the last year of study.
- 5. It is recommended that the use of tests be considered to assist in evaluation. For freshman applicants, the SAT and Achievements Test of the College Entrance Examination Board (CEEB) or similar tests would be helpful. On the graduate level, the GRE or ATGSB should be considered.
- 6. It would be helpful if a syllabus, course description sheet, or catalog could be obtained, indicating the content and duration of the courses taken.
- 7. Selective institutions generally urge that the freshman applicant have at least the HSC (12 years of study) with high Division II or better to be favorably considered. The graduate applicant level should be based upon the B.Sc. (Engg.) degree (4 years after the HSC) or M.A. or M.S. (2 years after the first degree). Credit up to three years (90 semester hours) could be given for the B.A., B.Sc., and B.Com. in both Pass and Honours degrees (2 years beyond the HSC).
- 8. It is recommended that no graduate credit be given where a master's degree representing only a total of sixteen years of education is presented.
- 9. It is recommended that applicants presenting a diploma from a technical or teacher-training institution representing twelve or more years of education be considered for no more than freshman admission.



VIII.

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OKINAWA AND PACIFIC ISLANDS: AN OVERVIEW

by Lee Zeigler



OKINAWA / ND PACIFIC ISLANDS

OKINAWA (Ryukyu Islands)

The Ryukyu Island group consists of 140 islands extending south of Japan over an area of 800 miles in length. The northernmost group (Amami-Oshima) was returned to Japan in 1953; the other groups remain under United States military control until 1972 when the total area reverts to the status of a Japenese prefecture. About 87 percent of the population of nearly one million is on the island of Okinawa, the name frequently used to identify the entire island chain. Okinawa is the largest island (450 square miles) and its principal city is Naha, once the capital of the Japanese prefecture and now the seat of the United States occupational government.

Ethnically, the Okinawans trace their origins to the Malay, the Mongol, and the Ainu; culturally, first the Chinese and later the Japanese left their influences with many uniquely Ryukyuan elements remaining. The Ryukyus became a Chinese tributary state during the Ming Dynasty, but during the 250-year reign of the Tokugawa shogunate of Japan, Okinawa was drawn more strongly into its orbit. In 1871, Chinawa was decisively annexed to the Japanese Empire. The consequent island-wide use of the Japanese language allowed development of a school system with a resulting high literacy rate. Modern civic activities were established, such as fire and police departments, public health and welfare, utilities and public transport.

Whereas the Okinawans had little voice in shaping policies that brought about the Pacific War, they were the chief sufferers. By the time of the Japanese surrender in 1945, in addition to the 100,000 Japanese military personnel killed, 100,000 were wounded. A United States military government of occupation was established which has allowed, over the years, increasing levels of civilian control and the establishment of legislative, judicial, and executive branches in the Ryukyuan government structure. The Okir awan people overwhelmingly identify with the Japanese and look forward to the 1972 transfer to Japan, despite the awareness of economic problems from the reversion to a civilian economy less dependent on United States military operations.

Education. Parallel to educational reforms in post-war Japan, the Ryukyus also developed the 6-3-3-4 educational system, with education compulsory through grade 9. Admission to the 37 public senior high schools is by examination. Most students who continue remain in public institutions, although some private high schools accommodate those who do not pass the senior high school entrance examination. The University of the Ryukyus, the first post-secondary institution in Okinawa, was opened in 1950. To develop a program of assistance, Michigan State University was chosen as a leading land-grant university since it was felt desirable to pattern the University of the Ryukyus after such an institution. The Michigan State contract was terminated in 1968. Although the University is essentially Japanese in character with instruction largely based on the lecture method, emphasis on examinations, and relatively little student-faculty contact, the Michigan State influence and that of United States-educated faculty members are seen in such American-style activities as freshman orientation, counseling, health service, job placement, and the use of the D and F grades on transcripts (not normally recorded in Japanese university documents). In general, a Ryukyuan university transcript should be evaluated in much the same manner as a comparable United States document.

The University currently enrolls approximately 4,000 students in its colleges of law and literature, sciences and engineering, education, agriculture and home economics, and a junior college division. Graduate programs and the establishment of a medical school are contemplated. Other less competitive post-secondary institutions are: Okinawa University, Kokusai University, Okinawa Christian College (two-year), and Okinawa Women's College (two-year). Since 1949, the United States Army-sponsored Ryukyuan Scholarship Program has sent 983 students to the United States for higher education. With Japanese reversion this program may be terminated, and since it accounted for the vast majority of Okinawans in United States colleges and universities, future Okinawan candidates for study in the United States, in competition with other Japanese students, may have few such opportunities.

PACIFIC ISLANDS

Any general statements which reflect the history, culture, and educational development of the vast Pacific Island area are of necessity oversimplified because of the marked differences in background and colonial development from one island group to another. The Pacific Bosin, apart from its land masses on the periphery, is generally divided into Polynesia with such subgroups as Tahiti, Samoa, Tonga, Fiji, Hawaii, and Maori; Melanesia (Borneo and the island cultures north and west of Australia); and Micronezia, stretching across the Central Pacific. The Spanish, Germans, Japanese, French, English, and Americans have had their turns at missionary influence and colonial control of various island networks, resulting in efforts to impose already established educational systems of the home country with varying degrees of seriousness and success.



Education. Education, basically incidental in native island cultures, became formal under colonial control. Foreign dominators were land-oriented in philosophy, with a consequent loss by islanders of native navigation and fishing techniques. The islanders, past and present-minded, have been told to plan ahead by foreign educators. The islands have moved from subsistence to monetary economies, group anonymity to competition, "Pacific time" to "specific" time. But the geography, with miles of ocean separating sparse population pockets, makes equitable educational opportunities, particularly beyond the elementary level, virtually impossible.

UNITED STATES CONTROLLED TERRITORIES

Guem. Unlike the rest of Micronesia, Guam is a United States unincorporated territory with full American citizenship for its inhabitants. In addition, Guam boasts a complete American educational system, with high schools accredited by the Western Association of Schools and Colleges, and the only institution of higher learning in Micronesia, the University of Guam (known as the College of Guam until 1968), with an enrollment of about 2,000 and full accreditation from the Western Association of Schools and Colleges.

Trust Territory of the Pacific Islands. Following the defeat of Japan in World War II, the United Nations Security Council approved a trusteeship agreement proposed by the United States under which the Mariana (excluding Guam), Caroline, and Marshall Islands became a Strategic Trust Territory under the responsibility of the United States.

Total administration was finally transferred from the Navy to the Department of the Interior in 1962, and through more recent developments of the Congress of Micronesia, the Territory is working toward self-determination. The entire group comprises more than 2,000 islands, but the total land area is only 687 square miles with a total population of 92,373 at last count.

Until 1962, the Pacific Islands Central School on the island of Ponape was the only public high school in the territory. There are now eight public high schools and seven mission high schools throughout the districts, as well as the School of Nursing in Saipan, the Farm Institute and the Micronesian Teacher Educational Center at Ponape. Education has been developed along American lines, with English the language of instruction when ever possible. The high school system is still not extensive enough to accept all qualified candidates.

American Samoa. An insular possession of the United States administered by the Department of the Interior, its 24,000 people carry the status of American "nationals." During the United States administration (1900–51), little was done to provide adequate education to Samoans. In the 1960's, with increased budgeting, an attempt was made to effect rapid reform through a comprehensive educational television system, which is now under critical evaluation. There are four public – and one missionary-secondary schools, and a teacher-training institution. To date, few American Samoans have been able to compete successfully in American colleges and universities, despite government scholarship opportunities.

Other Pacific Island Areas. With the exception of the two recently independent areas, the Kingdom of Tonga and the state of Western Samoa (both following New Zealand educational patterns), plus the tiny independent Nauru, with an Australian educational system, other islands are under the ownership or protection of various countries and reflect their educational systems in diverse degrees of development.

The British colony of Fiji is the location of two other Pacific Island institutions of higher learning. In 1886, a group of Fijians was started on a medical course which developed into the Suva Medical School, now known as the Fiji School of Medicine. This institution is still dedicated to producing rural practitioners. The School trains selected students to a standard acceptable for registration in Medicine and Dentistry, for employment in government service only as Medical Officers and Dental Officers (only government-sponsored students are accepted). The language of instruction is English, and students from throughout the Pacific are trained to serve in their respective island areas. The medical course, entrance for which requires a pass in the Cambridge Overseas or New Zealand School Certificate (for Fiji applicants), lasts for five years, and the dental course is of 3-1/2 years' duration. The programs, while not recognized in the United States as equivalent to M.D. or D.D.S. degrees, are highly regarded throughout the Pacific in helping to meet current health needs.

The University of the South Pacific, also in Fiji, opened for pre-degree courses in 1968 with 160 students. It currently provides three academic streams: arts, science, and education. The University, utilizing a former New Zealand Air Force base, is on a 130-acre site and hopes to serve the entire South Pacific basin. The only other institution of higher education in the Pacific Island area is the newly established University of Papua and New Guinea, which received its first students in 1966 and, in 1968, enrolled 268 full-time and 137 to time students. Located in Port Moresby, the territory's capital city, it offers four-year bachelor's degrees well as higher degrees in accordance with Australian educational patterns. The language of instruction is English, and admission is by successful completion of the Australian Matriculation Examination or its equivalent.

For statistics and detailed descriptions of the Pacific Islands and their educational resources, The Pacific Islands Yearbook and Who's Who is highly recommended. The tenth edition may be ordered from Pacific Publications Pty., Ltd., Technipress Plouse, 29 Alberta Street, Sydney, Australia.



APPENDIX I

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APPENDIX II

SAMPLE CREDENTIALS



否 港 中文中學 台 考 證 書 HONG KONG CERTIFICATE OF EDUCATION (CHINESE)

This is to certify that in 1969

郑全明

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entered for the Mong Kong Correlicate of Education Examination (Chinese) A MIDDLE & CANSIDATE and achieved the grades alcated account each of the subjects insted below

CHINESE
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CHINESE HISTORY
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Fig. 2 - New Chinese Certificate of Education (Hong Kong)

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Fig. 1 - Older Chinese School Certificate (Hong Kong)

KITHE ENGLISH SCHOOL CENTIFICATE

This is to Certify that

having fulfilled the required conditions is awarded the Hong Kong English School Certificate and has reached the pass grades indicated against each

of the following subjects:—

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Fig. 3 - Older English School Certificate (Hong Kong)

MONG KONG CERTIFICATE OF EDUCATION (ENGLISH)

香港英文中學合考證書

This is to certify that in 1969

entered for the Hong Kong Certificate of Education Examination English) as A FORM V CALAIDATE and achieved the grades indicated against each of the subjects listed below:

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ENGLISH LANGUAGE
CHINESE LANGUAGE
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GEOGRAPHY
BIOLOGY
CAFFISTRY
PHYSICS
MODIFICATION
MODIFIC Condidate No. 16685

HONG KONS CERTIFICATE OF EDUCATION LENGLISH) BOARD



Fig. 4 - New English Certificate of Education (Hc.19 Kong)

UNIVERSITY OF LONDON

012525



GENERAL CERTIFICATE OF **EDUCATION EXAMINATION** JUNE 1969

This is to certify that

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passed in the following Twets subject(s):

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Come No. Cook No.

Fig. 5. University of Landon General Certificate of Education (Hony Kong)

Serial Number_\$788/\$65/352-64



MATRICULATION CERTIFICATE

This is to certify that

has satisfied the Matriculation Requirements of this University in accordance with the regula, one at present in force, with qualification in the following saven aubjects:

A. By passes obtained at the Hong Kong University Matriculation Examination.

ADVANCED LEVEL English Literature History Chinese History (D)* Geography

ORDINARY LEVEL 1965 English language Chinase Biology

B. By passes obtained at other recognized Examinations:

ADVANCED LEVEL ORDINARY LEVEL

Date_July_18__1964

(D)* = Distinction

Fig. 7 - University of Hong Kong Matriculation Certificate

Esemination No 1205

THE CHINESE UNIVERSITY OF HONG KONG

> MATRICULATION CIRCIPICATE Thu is to certain that

the successfully person the Nathrelation Examination of this University in accordance with the Regulations at present in force with posses in the following to subjects:

> ci en language Enviro Language Seneral Mathematics

23m. June. 1968

Fig. 6 - Chinese University Matriculation Certificate (Hong Kong)

Examination Number \$523/698



OF HONG KONG

entered for the 1969 Advanced Level Examination and achieved the grades indicated against each of the subject listed below:

No. of passes as Advanced Level , three ...

No. of subjects listed . thres ...

Date: July 14, 1969.

"For explanation of grades, see overleaf.

Fig. 8 - University of Hong Kong Advanced Level Exam Certificate



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	First-year English	L.	54	, le .	81
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	Graph Chestatry		79	4	75 72 67 57
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	Mar Ta	. 0	85	0	57
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	Second-year Chinese	٠,	79	3	85
	Communication Registra	. j. ·	79 73 90 85	3	
	Prohibin Chemistry .	. 4	90	. 4	500 S
	Anglyric Chemiatry	: 3	85	3	۵.,
	Differentiant Equations (A)	, 2	67 .	- 2	60
	Secretal Physics	; 4	63.	4	73
	Imongenie Chemiatry	1	90	. 1	68
rd	(Implember, 1965 - July, 1964)	1			
	Physical Ctemistry	4	66 73	4	74
	Accommend inorganic Chemistry		73	3 .	71
	Organic Analysis (term course)	3	64	-	:
	In Leatring Chanterry	: 3 -	A2 .	3	67.
	Electricity and Magnetiam Logic		71	•	1
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	Advanced Organic Chemistry	1 3	82 -	5	A
	Instrumental Analysis	. 1	25	1	-/1
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	Atoric and Naclear Physics (B)		56 80 .	•	/ 1
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in September, 1963) Dince 1964, Inb work has been trusted no a meparate course

Ref. 265-193/2108'.

UNIVERSITY OF HONG KONG

-		omic Record at the University		Page No. 2, of 2
	Academa Year	Courses taken	Saumination taken	Resulta*
	1906-57	3.Sc. I - Chemistry 3.Sc. I - Physics 3.Sc. I - Kathematics	B.Sc. General Degree First Examination - May, 1967.	2016 2016 2016 2016
	: >6/~63	B.Sc. II - Physics B.Sc. II - Kathematics	No Examination.	1
	1 204-09	5.Sc. III - Physics 5.Sc. III - Mathematics	B.Sc. General Drumes Final Enquiration - May, 1969.	Pate
	1919-70	Fair stes	Examinations still to be taken	

UNIVERSITY OF HONG KONG

VI Dignes, Diplomas, etc. (a) Hagree I	in. Avstā 22	Classification**	Date of Conferences Formulation 20, 1929.
(h) Dintama/Cerunicase (c) States ut the time of "The tief of candid	much		erition as courses pary
First Class Horses Stand Class Horses	following divisions		Dart 24 007 1969

UNIVERSITY OF CAMBRIDGE



LOCAL EXAMINATIONS SYNDICATE

This is to tertify that the candidate named below sat for a joint Examination for the School Certificate and General Certificate of Education and qualified for the award of a

SCHOOL CERTIFIC TE

IN DIVISION ONE

incorporating a GENERAL CERTIFICATE OF EDUCATION. The candidate reached at least Grade 8 in the subjects named and attained the standard of the G.C.E. Ordinary Level pass where this is indicated.

		A100 2
PENANG ERFE SCHOOL		
	Grade	G.C.E. Standard
FUGITSH LANGUAGE	2	YRANIDRO
LITTRATUPE IN FRIGHTSH	3	CRDINARY
HISINAY	2	DADINARY
SE SEADILY	Ž	OPDINARY
MATHEMATICS	3	ORDINARY
STREET SCIENCE	2	URBINARY
201	5	VRANIDRO
SUMJECTS RECORDED SEVEN	G.C.E. PASS	ES SEVEN

FRAMINATION OF NOVEMBER/DECEMBER 1968

(Service) Enc Ashly Vice-Chance...

Fig. 13 - University of Combridge General Certificate of Education (Molaysia)



UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

IN COLLABORATION WITH THE

UNIVERSITY OF SINGAPORE

AND THE

UNIVERSITY OF MALAYA

This is to certify that the candidate named below sat for a joint Examination for the Higher School Certificate and General Certificate of Education and qualified for the award of a

GENERAL CERTIFICATE OF EDUCATION

The candidate passed at the level shown (Principal or Subsidiary) in the subject(s) named and attained the standard of the G.C.E. Advanced or Ordinary Level pass as indicated.

32 5	04
GRADL	A

PHE. Sulfitte

Enc Ashly

Vice-Chancelle
University of Sings

Fig. 15 - High School Certificate/General Certificate of Education (Malaysia)

UNIVERSITY OF CAMBRIDGE



LOCAL EXAMINATIONS SYNDICATE

THE MINISTRY OF EDUCATION MALAYSIA

This is to certify that the candidate named below sat for a Joint Examination for the Malaysia Certificate of Education and the General Certificate of Education and qualified for the award of a

MALAYSIA CERTIFICATE OF EDUCATION

incorporating a GENERAL CERTIFICATE OF EDUCATION. The candidate reached at least Grade 8 in the subjects named and atlained the standard of the G.C.E. Ordinary Level pass where this is indicated.

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(See overleaf)

a. L. Cormitage

Flg. 14 - Malaysia Certificate of Education



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Ni. CERTIFICATE

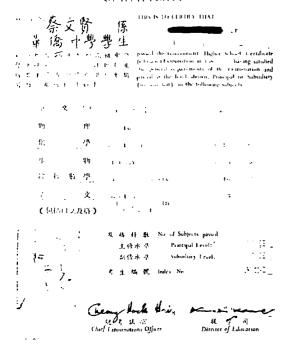


Fig. 17 - Chinese Higher School Certificate (Singapore)



SINGAPORE - CAMBRIDGE
GENERAL CENTIFICATE OF EDUCATION
AND A THE SINGAPORA - CAMBRIDGE
SIJUL 'AN PELAJARAN

medys - ceditals ---



This is to certify that, at an examination conducted in Singapore by the Ministry of Zaucation of the Republic of Singapore and the University of Cambridge Local Examinations Symbiates, the candidate mande below reached at least grade 3 in the subject named and attained the standard of the G. C. B. Ordinary lavel peace where this plant Like a the standard of the G. C. B. Ordinary lavel peace where this plant Like a the standard of the G. C. B. Ordinary lavel peace where this plant Like a the standard of the G. C. B. Ordinary lavel peace where the plant Like a the standard of the G. B. Ordinary lavel peace the standard of the G. B. Ordinary lavel peace the standard of the G. B. C. B. Ordinary lavel peace the standard of the G. B. C. B. Ordinary and G. B. C. B. Ordinary of the G. B.

கிகப்பூற்க் குடியரக்க கண் நடைக்க பெண்ணிட்டு பக்க கேக் கழக கற்றுத் தேற்றுக் தட்டுக்குறாக் கிகப்பூடுக் நடத்திய தென்னிக் சிற குறிகப்பெற்கள்ள மானம் பின்னதம் பாடக்கள் குறைந்தன் சேறுக் தரிக்கப்பெற்கள்ள மானம் பின்னதம் பாடக்கள் தொற்றுக்கு சாதரான இரு தெற்கக் பெற்ற பாடக்குக்கெற்றே தந்தின் குறிக்குப்பெற்கள்கை இருத்

WONG KIN KONG



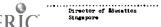
423/576

Queensway Secondary School

Subject	Grade	G.C.E Standard	<u> Madium</u>	Ameninia Authority
English Language	4	Ordinary	English	Cambridge
Chinese	3	Ordanary	Chinese	lings pore
His tory	3	Ordinary	anglish	Cambridge
Kathenatica	5	Ordinary	English	Cambridge
Malay Litersture	7	-	Rains	Singapore
lover Tamil	в	_	Tem11	gingapore

Number of Subjects recorded: Six. General Certificate of Education Passes: Four The attainment shown by Grades_2 7 and 8 is below that required for a G.C.E. Ordinary level pass.

Exemination of November/December 19



Vice Chancellar University of Contridge

Fig. 19 - Singapore - Combridge General Certificate of Education



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Statement

(No relience mould be placed on the occurring of this statement should there be any alteration or encours or team in it).

I hereby fartify that in the Joint Examination for the School Cartificate and General Cartificate of Education held in 197%

remaind the grader stat d in the subjects as shown below:

LEAR ? 1 1969 L'ITERNATIONAL

Gr ala*		Grade	- Catastrale
.2	"nglith language	-2	Physics
•'	English Literature	3	Chemistry
	Bill- Knowle'ge		Diology
1 .	History		Physics -with-Chemis try
	Geography		Art
	intin		#codwork
	Prench		
7.	Liver R. Constant		Geometrical and Mechanical Drawing
ı	Pathosa Lica		Commercial Subjects
3	Additional Unthematics		
i	German Science	1 - 1 - 1	
	Additional General Science		Health Science
tratication	10 10504217	L 4 -4	

Type of Co. tiffcate (if may) manded to the condidate:

dulate failed to abbin any form of certificanto An implementan of the Gredes and Divisions is given overleaf

School Certificate () [1857] Division*) incorporating a General Certificate of Education Concret Circlifficate of Pohilation

This statement is supplied to Thinksely of Mounty PO Ros 8124 Cont Coller Monda 3316 Oca

Fig. 18 - University of Combridge School Certificate/General Certificate of Education (Singapor

SINGAPORE - CAMBRIDGE GENERAL CERTIFICATE OF EDUCATION"

At present, Secondary IV students sit for four different examinations leading to the award of 4 different School Certificates according to their medium of instruction: the School Certificate awarded by Combridge for the English stream, and the Chinese, Tamil and Malay School Certificates awarded by the Ministry of Education

the tragits stream, and the Chinese. Tomic and Moday School Certificates awarded by the Ministry of Education for the other 3 language streams. It has been decided that a common examination leading to the award of a single certificate for the 4 language streams shall be Instituted as from 1971. The Certificate, to be called the Singapore Combridge General Certificates of Education, will be issued under the Joint auspices of the Singapore Ministry of Education and the Cambridge Syndicate, the former being responsible for subjects examined in the medium of Chinese, Molary and Inmit; the latter responsible for subjects examined in the medium of English. A draft specimen of the proposed Certificate is attached. A uniform system of grading, the results will be adopted by the two examining authorities. The Certificate issued will clearly indicate what subjects have been examined by which authority and in what language medium.

Cartificate is stacked. A uniform system of grading, the results will be adopted by the two examining outhorities. The Cartificate issued will clearly indicate what subjects have been examined by which authority and in what language medium.

School candidates sitting the examination on their first attempt will be required to offer a minimum of 5 and a maximum of 8 subjects. Private condidates and repeat school candidates may offer one or more subjects. Choice of subjects in the GCE will be much more flexible than in the School Certificate, the only restrictions being those impased by our own curricula and not those imposed by an external body on in the cost of the Cartificate School Certificate Examination.

The proposed change over to the new system of examination is dictated by 4 main considerations. First, the fact that certain subjects are now tought in the medium of the second language makes it improciscable to continue with the Cambridge School Certificate Examination, which is sessificatly a monolingual examination. Secondly, the rwing to technical and expensive for an oversess body to examine. Thirdly, the advantage of the GCE over the School Certificate is widely recognized. Britian discarded the School Certificate in flavour of the BCE on 1 are back as 1951. Fourthly, a common Certificate will reflect with a procision flavour of the BCE on 1 are back as 1951. Fourthly, a common Certificate will reflect the parity and unity of the Republic's advantage of results will not be affected by the change in the examination system, not will stondards be lowered. By grading of results will also remain the same. In fact, the GCE system is already well known to school to the gradinate of a credit in the School Certificate and the GCE. The grading of results will also remain the same. In fact, the GCE system is already well known to school to be one careficated by the change in the examination for the School Certificate and the GCE. The equivalence of a credit in the School Certificate one "O" level in the GCE is a

Fig. 20 - Singapore - Cambridge General Certificate of Education - Special Explanation

^{*}Source: Ministry of Education, Singapore, January 1970.

THE UNIVERSITY OF MALAYA



DEGREE OF BACHELOR OF SCIENCE WITH HONOURS

It is hereby certified that

has duly completed the presented centres of study and satisfied the Examiners in the Fire H losooms Examination for the Depree of Hubelot of Secure in July 19 being placed in Class Place (Myre) and that the way admitted to the Degree of Backelor of Secure with Homous of this University on 19th (Myrenders, 2)

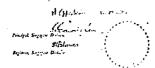


Fig. 21 - University of Singapore B.Sc. Degree Certificate

NANYANG UNIVERSITY Jurong Road, Singapore 22. TRANSCRIPT OF ACADEMIC RECORD

College Date of Matriculation

Present Year of Study

Academic Years & Subjects	Credits	Grade
First Year (1966/67)		
Economic Analysis (1)	6	l e
Statistics (1)	6	ÌВ
Accounting (1)	6	В
Hithematics (1)	6	8
Socialngy (1)	6	C
Days leal Education	NR.	В
	30	
Second Year (1967/68)		
Economic Analysis (II)	1 6 1	Dia
Statistics (II)	1 6	В
Money and Banking	. 6	
Accounting Theory and Analysis of Financial Data	3	Ð
Principles of Management and Organization	6	В
Accounting (II)	6	E
Commercial Law (1)	· 6	. c
	69	_
Third Year (1968/69)	1. 7	
Accounting (III)	6	
Commercial Law (31)	6	
Business Finance	6	B
Managerial Accounting	6	. 8
Taxation	6	C
Auditing	6.	
Economic Development (I)	3	C
	108	
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	1 1	
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P# 154





EINOOD HIGH SCHOOL 101 Glenhuntly Road, ELWOOD. 3184

17th March 1969

This is to certify that a student at this school from 1958 until 1964 when he passed the Katriculation Certificate examination.

A. K. Spinia

RECEIVED MAR 27 1969



23 Fabruary 1968

This is to certify that

matriculated as a student of this University on 12 April 1961, and the following is her scalesic record in the course for the degree of Bachelor of Science -

November 1961: Biology, Chemiatry Part I, Physics Part I, Pure Mathematics Part I,

Although she fasied to mattafy the examiners in the subject of Chemistry Part 1, she was granted a Pana by the Faculty in the First Year of the course as a shole.

November 1962: Applied Mathematics Part I, Physics Part IIA.

Pure Mathematics Part II,

November 1963: Physics Part IIIA.

Second Class Honours (Division H)

Pure Mathematics Part 1118,

ans admitted to the degree of Bachelor of Science at a conferring eremuny held on 4 March 1964.

In the course for the degree of Bachelor of Education she obtained following results at the Annual Examination -

November 1964: History and Principles of Education.

Comparative Education.

Educational Paychology.

Methods of Tasching.

Practical Teaching.

Second Class H

February 1965: History and Principles of Education, Comparative Education, Educational Psychology, Pass.

thereby completing the First Year of the control and qualifying to be granted the Diploma in Education in this University.

Fig. 25 - Bachelor of Science Degree/Diploma in Education Record (Australia)

NACHALISMA DEPARTMENT OF THE CATION

ERVIDAGED SCHOOL CERTIFICATE

Lettern Committee the State and advice Literature Wellett

This is to Certify that

HAS THEREBY QUARTED FOR THIS CURTIFICATE

Artes to the Gray & School College

Fig. 27 - Endorsed School Certificate (New Zealand)



DEPARTMENT (1963) OF EDUCATION

SCHOOL CERTIFICATE

This is to certify that

having completed a course of at least three years' post primary education in averdance with the Education (Dist primary Instruction) Regulations (2004), and having passed the School Certificate Examination held in 2004, and having passed the School Certificate Examination held in Acouster 1961, has qualified for this certificate



DEPARTMENT OF EDUCATION

HIGHER SCHOOL CERTIFICATE

files with the regulations made under the Education Act 1916

This is to Certify that

secondary instruction (which included two years of a course in advance of the standard prescribed for the School Certificate Examination) and having fulfilled the conditions of tegulation 9 o. 10 of the Lituration (Post-primary Instruction) Regulations 1954

> HAS THEREBY QUALIFIED FOR THIS CERTIFICATE travel or Walmen in thints-wall . in of December ____ 19 63

> > A E Campbell

Fig. 28 - Higher School Carrificate (New Zealand)

Universities Entrance Sound Coetificate of Entrance Qualification Year 1969

Chie to Certife that

Comment of the Comments of the

having shown competence in the following only its

EKGL ISH

MATHEMATICS

PHYS ICS

CHEMISTRY

BOOKKERPING

of the University Entrance Examination, has qualified for a pass in the Examination and is granted this certificate of filness to matriculate in any University in New Treatend

~ University Entrance Examination Contificate (New Zeeland)

VIDYODAYA UNIVERSITY OF CEYLON



Informediate Granduction in Arts

This is to Certify that

(Index No. C & 330)

passed as an Internal Student of this University the Intermediate Examination in Arts held in Lee mber, 1959

1. World Husbory 2. Englisher
3. Economics

Dharmasastronnatikami,

- Barrella

Date 23rd Collember hylor Vidyalisa Viscerity of Ceylon,

WELLINGTON TEACHERS' COLLEGE

11th Supremier, 1984

fr April 1111

(Explanatory Seres:

- The Course of Liaming for elegandary second teachers in New Zonland consists of
- (a) A advance and professional studies for two years in state teachers, colleges conditional and of screaming and printing \$\frac{1}{2}\$ to a ring in approved. As a condition.
- (id) productions to relative out one controlled the perdance of espectioned head to be been

On the successful completion of this course the trainer is awarded a Tracher's certificate by the See Zealand Department of Blocation, qualifying him of her to trach in any elementary school in the State.

In New Zealand the analogs, your boytes in Figure 2, and ends in Desember and so divided into three terms of approximately particle weeks each. In this culling each seek consists of five days or five and three-quarter hours each day.)

I certify that

It Petruary 1944 to 10th December, 1945, and once establis completed the context

The following table shows the subjects taken, the number of locarre houses(50)

apent on each, and the grade by passignined (Sepoint scale, I's excellent).

Subjects:	Lecther Hours.	firade of Pass.
	(Tutal over 2 years).	
Education: Theory	. 63	2
Principles & Methods	1.	?
funter samel	. 11	3
Practice Teaching	475	7
English(im luding Speach training)	. *4	3
Health Education } Physical Education)	152	2
Music	87	;
Art and Craft fineluding perdicuses) 141	1
History	40	
Graggaphs	14	1
Se tence	5.1	1
	W.J. Scott, M.A.	J. P.
	Principal	-

UNIVERSITY OF LONDON



GUNERAL CERTIFICATE OF EDUCATION FXAMINATION JUNE 1960

This is to certify that

sat for the above examination at the Centre in

COLOUDO CEYLON

and passed at the Advanced level in the following subject(s):

ENGLISH ECONOMIC HISTORY CRITICE COUSTITUTION

77 150

ව ලබන විදේශිත් විස්වර්දලක 👡 Wighter Charte a Cala ພວງຕົວການຊາຍຊື່ ການນີ້ ຍວີເວອາພ BA (Besa) bay Sana නමුල්ලයේ ආසනු මෙමනු 🔻 ఇక్కర్ను సిన్నార్ కార్ లైన్ లో మీట్ కోస్ట్ ప్రాటెక్ట్ కార్డ్ కోట్లాన్ ఉంది. ఇక కేట్ ఇక కేట్ ఇక్కట్లు ఇక్క్రిక్ (ISD 4 No. 9.0.055) was a conductor for the B.A. (Hoss.) Examination held in DCCOMSUCS 98. offering the subjects (1) CONVINICATION

and residual the standard required for Section Communication (Subsidiary) Homours for Pass

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Fig. 33 - Vidyadaya University of Caylon B.A. (Hone.) Cartificate

No Change in any entry in this certificate shall be made except by the Authority issuing it, any infringement of the rule, fiable to be dealt with by rustication or by other suitable punishment

(sees Ruly 12-1 in chapter IV of the grant-co-side opie) 20:

B.E.S. T.L. T. EYCH ROYCUL, YANSKOI (EFFCHALIA) Diet Sarat Leaving Certificate

G. Register No. of the pupil 226 I Name of the Pupil in Full -2 Race and Religion Tind Pager attende to # me (12) 1 1 2 144 to Christian district words (First Strong Minetern aumitred and forty air substitutivity in the $\mathcal{W}_{\mathcal{A}}$, the $\mathcal{W}_{\mathcal{A}}$, and the same substitution of the $\mathcal{W}_{\mathcal{A}}$ 300 sidered as whose states, and arrest when the similar states 10-6-10-6and free to the thirty with up for the de in me harda 65 ine to the genous mail or note Add Dored the 9.0.0 Room belt in March 165

I Cert is Certified that the above information is in incordance with the general register of small Princepal Heat Maste

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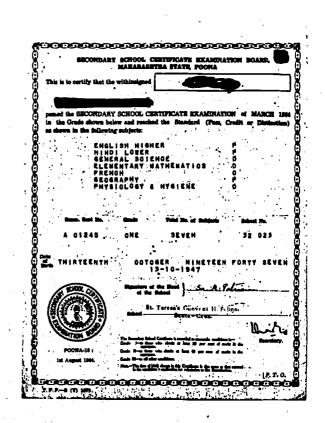
Vidyedaya Eniberally of Ceplon

This is to certify that at a Convocation held on Tuesday the Ninetzenth day of November the year One thousand Mine-hundred and sixty three

> was admitted to the Degree of Bachelor of Orts



- Vidyedaya University of Ceylon Bachelor of Arts Dial



SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD, MAHARASHTRA STATE.

Nº 115386

Statement showing the marks in each subject obtained at the S. S. C. Examination of March 1964.

	Candid	iato'o full	name	beginnin	g with !	Burnam	ie		Centre No-	Candid	asc's No		itrict s	1d (f)	100 E	ubjects c laximum	marks e	3eb.	
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Centre Ma.	CARDIDATES No.	RESULY	in the second	Grand Total	Lang. Higher Lavei	Lang. Lover Lovel	Social Studies	Gen. Science	Elem. Exthat Alg. Goom.	English (28)	Science	Mod Mod Surp.	History	Geog	Adm.	Arish.	Art	Type	Hod. I Land UB46 Gr. 1
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					Fuhery	Hand made Paper	Che- mical Tech	Radio	Radio Service Work	West.	Bd. Spr a Hd. Wic.	Dyeing Tech.	Survey.	W/a. Tech. Or. II	Bldg. Nat. and Const.	Tailor- ing 204 Cutting	Tailor- ing and Embr.	Typo- graph)	Europ an Musi
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Foons, June 1964

Secretary. S S. C EXAMINATION :

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Fig. 37 - Secondary School Certificate Examination Marks Sheet (India)

BOARD OF SECONDARY EDUCATION, MADRYA PRADESH

ERCP AL

MARK- SKEET. HIGHER JECONDARY SCHOOL CERTIFICATE EXAMINATION.

TEAR | 1987 S.HO. 079665 [ROLL NO. [DIVISION] DISTRICT] CONTRE [SCHOOL [DATE OF RECE CANDIDATE'S NAME

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D	84 88 87	HISTORY CIVICS ECONOMICS	200 200 200	68 68 68		0 9 0 079 092		080 079 092	
		·	900		L! Brand To	 Tal.		-) ****	

has attained the desired proficiency is the following subjects:(For Regular Candidate only)

I G.SCHENCE

MIDICATES ABSETT.
INDICATES DEFICIENCY IN THEORY OR PRACTICAL.
IMPLICATES DISTRICTION IN THE SUBJECT.
PR INDICATES PRIVATE CANDIDATES

SED.
Asstt. Secretary.
BOARD OF SECONDARY EDUCATION,
MADRIA PRADESH, BROPAT.

CAMBIDATE WED HAS BEEN AVARIABD SUPPL. HAS TO APPEAR IN THE SUBJECT OR PART MARKED WITH ASTERISE.

Assistant Registrar.

BUARD OF SECONDARY EDUCATION, MADHYA PRADESH BHOPAL

MARK-SHEET

HIGH SCHOOL CERTIFICATE EXAMINATION

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BOARD OF SECONDARY EDUCATION,
MADHYA PRADESH, BHOPAL

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Fig. 38 - High School Certificate/Marks Sheet (India)

UNIVERSITY OF, CAMBRIDGE



LOCAL EXAMINATIONS SYNDICATE

in co-operation with

THE COUNCIL FOR THE INDIAN SCHOOL CERTIFICATE EXAMI. ATION

This is to certify that the candidate named below, having been in attendance for the specified period at a school approved by the Council and the Syndicate. sat for the Indian School Certificate Examination in 1963 and qualified for the

INDIAN SCHOOL CERTIFICATE IN DIVISION ONE

Incorporating a GENERAL CERTIFICATE OF EDUCATION, The candidate reached at least grade B)in the subjects named and attained the standard of the G.C.E. Ordinary Level pass where this is indicated.

T MARYIS HIGH SCHOOL FOOMA

,	Grade	G.C.E. O. Level
ENGLISH LANGUAGE	4	P A B S
ENGLISH LITEHATURE	t	P.4.8.8
HISTORY	2	P A B B
GEOGRAPHY	3	7488
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Intermediate Exa	
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Intermediate Examination, held in the month	· ·
subjects :	•
1. English Literature. 2. Physics 3. Charmotte. 4. Diology april distinction in and was placed in the Third Division	NO COLOR
No. 2885	Parmanand
Allanabad : The Ist October, 1949	ы.a., Secretary.

Fig. 41 - Intermediate Examination Certificate (India)

University of Bombay



Nº 6299

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Fig. 42 - Intermediate Examination Certificate/Marks Sheet (India

No.771

STATEMENT OF MARKS
obtained in each subject at the Pre. University Examination in Science (New Course)

Name

Seat No

College
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Seat No

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Fig. 43 - Licentlate in Teaching (India)

Flo. 44 - Pre-University Exemination Cartificate Marks Shore (1) 41

Directorate of U.F.

Ist July 1955.

ianliye P. Works, Abmedsbad.

Seat No.

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College

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R Sc 5-40% of the marks in English or General & 44% of the marks in any of other subjects provided passing in that subject.

Seat No. 128

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Gujarat University

(11)

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True Copy Fee of Rs 2-Received

University Regietrar

Fig. 46 — Second B.Sc. Examination Certificate/Marks Sheel (India)

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FACULTY OF SCIENCE

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Fig. 48 - Bachelor of Science Degree Certificate (India)

Fig. 47 - Third (Final) B.Sc. Degree Examination Certificate/Marks Sheet (India)

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University Registrar

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STAEMENT OF MARKS (Detail)

Note:-400 Indicates Exemption

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Gujarat University

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Fig. 49 - Bochelor of Education Degree Certificate (India)

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Fig. 51 - Master of Science Degree Certificate (India)

Book No 1

UNIVERSITY OF MYSORE

Огенск не тик Интуквыту от Музови,

Myser, Dated 2 9 MAY 1965

STATEMENT OF MARKS

Ed. Degree Examination—March/Septembre 1965.

(Henomal College of Odmation)

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6 Internal Assessment	25	10	lia			ļ	/
7 Psychological Foundations	110	38	45	•			i
8 Internal Assessment	40	16	17			i	<i>j</i> •
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Fig. 50 - Bochelor of Education Examination Marks Sheet (India)

Office of the Principal,
D. A. V. College, Dehradun.

Copy of the Marks obtained by Sri

Subject/Papers	Max. Marks	Minimum Pass - Marks	Marks Obtain	etical Total
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T	160	36	43	167
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University of Allahabad

HATEMENT OF MARKS
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SENATE HOUSE.

Assumant Registrant (Administration)

Fig. 53 - M.A. (Final) Exemination Marks Sheet (India)

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Statement of Marks obtained by a		_
Roll No. 4587	Secondary_School	Conving Cambantles
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	obtained	Marks
1. English (Lighter/Heavier)	97	200
2. Urdu (Lighter/Hjavier)	49	100
3. Methematics	. 8/-	100
4. General Science/Domestic Science	_E s	100
5. History & Geography	<u> </u>	100
Elective Supports:	Division if any Checked by Part of PRINTI	100 100 150 150 150 170 170 170 170 170 170

Fig. 55 - Secondary School Leaving Examination Marks Sheet (Pakinton)

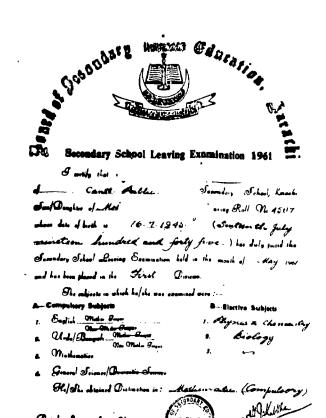


Fig. 54 - Secondary School Leaving Certificate (Pakiston)

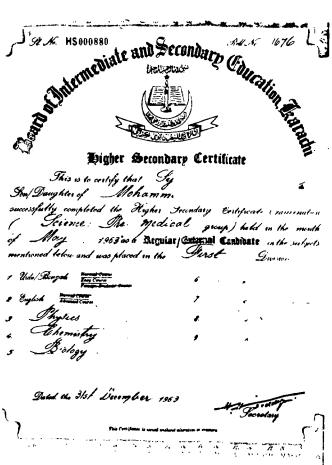


Fig. 56 - Higher Seconds Court of the S

BOOK NO: 1 +

Board of Intermediate & Secondary Education, Karachi.

Higher Secondary Certificate (Class XII) Part II Esantantice, 196 3

Consolidated Statement of Marks secured at Parts 1 & 11 Izandantices

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Note :-- A readidate petting 71% marks in any maject earns distinction.

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Dec 17=8=1964.

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Ancistant American Controller of Exeminations

Fig. 57 - Higher Secondary Certificate Examination Marks Sheet (Pakiston)

University of Karachi



Bachelor of Science (Pass)

Mherens

has pursued a course of study presented by this University for the Degree of Bachelor of Science (Pass) in the Faculty of Science and has pussed the requisite examination held in her have have given placed in \$ 8 % \$ 7 class:

It is hereby certified that befohe has this day been duly admitted to the degree of Bachelor of Science (Dass) in this University at the Convection of 1966.

Regionage in

Vice Chancollor

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Notes Detailed transcript of examination results have been inseed reperately.

Fig. 56 - Bachelor of Science (Pass) Degree Certificate (Pakistan

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	Following are the marks obtained by											
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Fig. 61 - M.Sc. (Previous) Examination Marks Sheet (Pakistan) 11-4-

University of Karachi

PROVISIONAL CERTIFICATE

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Fig. 60 - M.Sc. Darren Cartificate (Poliston)

Fig. 62 - M.Sc. (Final) Examination Marks Sheet (Pakiston)